

VDOİHİ

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

Cilt 2.3.1.3.3.1.1.3

İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık Cilt 2.3.1.3.3.1.1.3

İsmail YILMAZ

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1. Bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

Dili: Türkçe + Matematik Mantık



Türkiye Cumhuriyeti Devleti
Kuruluşunun
100.Yılı Anısına



K. Atatürk

Yazar Hakkında

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

VDOİHİ

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- ✓ Bilgi merkezli değerlendirme yöntemidir.

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

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GÜLDÜNYA

Simge ve Kısaltmalar

n : olay sayısı

n : bağımlı olay sayısı

m : bağımsız olay sayısı

l : bağımsız durum sayısı

I : simetrimin bağımsız durum sayısı

II : simetrimin bağımlı durumlarından önce bulunan bağımsız durum sayısı

I : simetrimin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

lk : simetrimin bağımlı durumları arasındaki bağımsız durumların sayısı

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

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

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

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

l_s : simetrimin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz

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

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

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

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

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

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

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

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

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

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

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

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

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

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

D : bağımlı durum sayısı

D_i : olayın durum sayısı

s : simetrinin bağımlı durum sayısı

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

m : olasılık

M : olasılık dağılım sayısı

U : uyum eşitliği

u : uyum derecesi

s_i : olasılık dağılımı

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

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

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

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

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

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

$f_Z S_{j,sa}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı simetrik olasılık

$f_Z S_{j,sa,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı simetrik olasılık

$f_Z S_{j,sa,D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı simetrik olasılık

$f_Z S_{j_s,j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre simetrik olasılık

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

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

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

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

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

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$f_Z S_{j_s,j,sa,D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

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

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

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durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre simetrik olasılık

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fzS_{js,jik,j^{sa},j_i} : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık

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$fzS_{j_i}^{DSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

simetrisinin son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık

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

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durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık

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

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olaylara göre toplam düzgün simetrik olasılık

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$f_zS_{j_i}^{DOSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

$f_zS_{j_i,0}^{DOSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız

simetrinin son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

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

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$f_{z,0} S_{j_s, j_s^{sa}}^{DOSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

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

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bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

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simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

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$fz S_{j_s,j_{ik},j^{sa}}^{DOSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı toplam düzgün olmayan simetrik olasılık

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$fz S_{j_s,j_{ik},j^{sa},D}^{DOSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı toplam düzgün olmayan simetrik olasılık

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

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

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

$fz S_{j_s,j_{ik},j_i}^{DOSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı toplam düzgün olmayan simetrik olasılık

$fz \overset{DOSD}{\Rightarrow}_{j_s, j_{ik}, j_i, 0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı toplam düzgün olmayan simetrik olasılık

$fz \overset{DOSD}{\Rightarrow}_{j_s, j_{ik}, j_i, D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı toplam düzgün olmayan simetrik olasılık

$fz, 0 \overset{DOSD}{\Rightarrow}_{j_s, j_{ik}, j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı toplam düzgün olmayan simetrik olasılık

$fz, 0 \overset{DOSD}{\Rightarrow}_{j_s, j_{ik}, j_i, 0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı toplam düzgün olmayan simetrik olasılık

$fz, 0 \overset{DOSD}{\Rightarrow}_{j_s, j_{ik}, j_i, D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı toplam düzgün olmayan simetrik olasılık

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

durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı toplam düzgün olmayan simetrik olasılık

$fz,0 \Rightarrow j_s, j_{ik}, j^{sa}, j_{i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı toplam düzgün olmayan simetrik olasılık

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herhangi bir ve son durumuna bağlı toplam düzgün olmayan simetrik olasılık

$fz \Rightarrow j_s, j_{ik}, j^{sa}, j_{i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı toplam düzgün olmayan simetrik olasılık

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$fz,0 \Rightarrow j_s, j_{ik}, j^{sa}, j_{i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı toplam düzgün olmayan simetrik olasılık

$fz,0 \Rightarrow j_s, j_{ik}, j^{sa}, j_{i,D}$: 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 toplam düzgün olmayan simetrik olasılık

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

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

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

E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

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

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilen dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayısından (bağımlı olay sayısı) büyük olmasına (bağımsız olay sayısı) dağılımla bağımlı ve bir bağımsız olasılıklı dağılımlar elde edilir. Bağımlı dağılım farklı dizilimsiz dağılımlarda incelendiğinde, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar denir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk durumdan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı 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 durumlarıyla başlayan dağılımlara göre de tanımlanması eşitlikleri verilmektedir.

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

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

Bu yolla bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin ilk ve herhangisi bir durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık eşitlikleri verilmektedir.

SİMETRİDEN SEÇİLEN İKİ DURUMA GÖRE TOPLAM DÜZGÜN OLMAYAN SİMETRİK OLASILIK

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$j_{sa}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{sa}+n-D}^{n} \sum_{(n_i=n)}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_{sa}} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{sa}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

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

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

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

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

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

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

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

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

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

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \binom{D + \mathbf{l}_{sa} - n - \mathbf{l}_{sa}}{k} \\ & \sum_{k=1}^{(\mathbf{l}_s - 1)} \sum_{j_{sa} = \mathbf{l}_{ik} + n - D - j_{sa}^{ik} + 1}^{\mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{n_i = n}^{(n_i - j_s + 1)} \sum_{n_{is} = n - j_s + 1}^{n_{is} - j_s - j_{sa}} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} - j_{sa} + 1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ & \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left(\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j_{sa} - n - \mathbf{l}_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ & \left(\sum_{k=1}^{D + \mathbf{l}_s + j_{sa} - n - \mathbf{l}_{sa}} \sum_{(j_s = \mathbf{l}_s + n - D)}^{(\mathbf{l}_{ik} + n - D - j_{sa}^{ik})} \sum_{j_{sa} = \mathbf{l}_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{\mathbf{l}_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \right. \\ & \sum_{n_i = n}^n \sum_{n_{is} = n - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa}} \\ & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \right) \end{aligned}$$

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

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

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

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

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

$$\frac{(l_{sa} - l_s - j_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - 1)!}.$$

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

$$\sum_{k=1}^{D+l_s-\mathbf{n}-l_i} \sum_{j_s=l_i+\mathbf{n}-D-k+1}^{j_s-\mathbf{n}-l_i-k+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}-j_s-k+1}$$

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

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

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

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

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

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

$$l_s + j_s - j^{sa} - j_{sa} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_{sa}-j_{sa}+1)}^{(j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_{sa})} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} \right) + \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_{sa}-j_{sa})}^{(j_{sa}-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-k} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}=l_{sa}+n-D} \right)$$

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \right.$$

$$\sum_{(j_s=\mathbf{l}_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(\mathbf{l}_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_{z \sim j_{sa}}^{QSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_{sa}-k+1} \sum_{n_i=\mathbf{n}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\}$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_s+\mathbf{n}+j_{sa}-D-1}^{\mathbf{l}_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - \mathbf{n} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - j_{sa} - \mathbf{l}_s - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=1}^{D+\mathbf{l}_s-\mathbf{n}-\mathbf{l}_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-k+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_{sa}-k-j_{sa}+2)} \frac{(n_i - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_{sa}-k-j_{sa}+2)} \frac{(n_i - j_s + 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}.$$

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} & f_Z S_{j_s, j_{sa}}^{DOS} \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+1, \dots, D-j_{sa}^{ik}+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-k-j_{sa}^{ik}+2)} \\ & \sum_{n_i=\mathbf{n}}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{sa}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\ & \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \end{aligned}$$

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

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

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = \dots \Rightarrow$$

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

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

$$\sum_{n_i=n}^n \sum_{n_i=n}^{(n+j_s+1)} \sum_{n_i=n}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n}^{(n+j_s+1)} \sum_{n_{ik}=n}^{(n+j_s+1)} \sum_{n_{ik}=n}^{(n+j_s+1)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa})! \cdot (n + j_{sa}^s - s - j_s)!}.$$

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

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

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

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

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

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

$$D \geq n < n \wedge I = \mathbb{k} = 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1, j_s \leq j_{sa}^i - 1 \wedge$$

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

$$s \geq 3 \wedge s \leq s \Rightarrow$$

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

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

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

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

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

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}-j_s)!}$$

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

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

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

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

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\quad)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-1)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^s-s)!}.$$

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

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

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\}$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{lk}+1)}^{(j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+\mathbf{n}-D}^{l_{ik}+j_{sa}-k-j_{sa}^{lk}+1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!}.$$

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

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

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

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\}$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

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

$$\frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\quad)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^s-s)!}.$$

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\sum_{k=1}^{\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \frac{\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}.$$

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

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

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

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

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

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

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

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

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=0}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-k)}^{(l_{ik}+\mathbf{n}-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz^{D-\mathbf{n}+1} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_s+j_{sa}-k} \\ \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\ & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \end{aligned}$$

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\quad)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-l_i)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^s-s)!}.$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned} f_{ZS}^{D0} S_{j_s, j_{sa}}^{D0} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}+j_s-k} \\ &\quad \sum_{n_i=n}^{n_i-j_s+1} \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ &\quad \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\ &\quad \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

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

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

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

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

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \cdot$$

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}^{s-1}, \dots, j_{sa}^i\} \wedge$$

$$s \geq j_s = s \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right)$$

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

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

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

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

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

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

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

$$\frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa})! \cdot (\mathbf{n} + j_{sa} - s - j_s)!} \cdot$$

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

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

$$\sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{j_{sa}^{lk}+j_{sa}-1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_{sa}+1)}^{(n_i-j_{sa}+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}}^{n_{is}-j_{sa}} \frac{(n_i-n_{sa}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+1)!} \cdot \frac{(n_{is}-j_{sa}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}-j_s-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}-s)!} + \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(j_s-1)} \sum_{j_{sa}=j_{sa}}^{(j_{sa}-1)} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_i-j_{sa}+1)} \frac{(n_i-n_{sa}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+1)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}-s)!} \right) +$$

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

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

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

$$1 \leq j_s \leq j_{sa}-j_{sa} \wedge$$

$$j_s+j_{sa} \leq n+j_{sa}-s \wedge$$

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

$$D+j_{sa}-n < l_{sa} \leq D+l_s+j_{sa}-n-1 \wedge$$

$$D \geq n < n+1 \wedge l=\mathbb{k}=0 \wedge$$

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
 f_{zs} S_{j_s, j_{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right. \\
 & \sum_{(j_s=j_{sa}-j_{sa}+1)}^{(j_s=j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\
 & \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)
 \end{aligned}$$

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

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

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

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

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_{sa}}^{l_{sa}, D} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

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

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

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

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

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

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

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

$$\left(\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \sum_{(j_s=2)}^{(\mathbf{l}_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

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

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{is} + j_s - n - j_{sa}^s - j_s + 1)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(l_s - k)! \cdot (l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

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

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

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

$$D + j_{sa}^{ik} - n < l_{ik} < D + l_s - j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 1 \wedge$$

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

$$s: \{j_{sa}^l, j_{sa}^s, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \binom{D+l_s+j_{sa}-n-l_{sa}}{k} \sum_{k=1}^{(l_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{n-D-j_{sa}^{ik}+j_{sa}} \sum_{n_i=n}^{(n_i-j_s)} \sum_{n_{is}=n-j_s+1}^{n_{is}-j_s} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} \right) + \\ & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \right. \\ & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right) \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-l_s)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^s-s)!}.$$

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

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

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

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

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

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

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

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

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

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

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

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

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

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

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

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

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

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

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

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n})) \wedge$$

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{j_s=j_{sa}+1}^{j_{sa}-j_{sa}+1} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}-j_{sa}+1} \\ & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{n_{is}+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} + \\ & \sum_{k=1}^{i^{l-1}} \sum_{j_s=2}^{l_s-k+1} \sum_{j_{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\ & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{n_{is}+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \end{aligned}$$

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

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^n \sum_{i=0}^n \sum_{j_s=1}^{()} \sum_{j_{sa}=j_s}^{()} \sum_{j_{sa}=j_s}^{()} \frac{(n_i + j_s - \mathbb{K} - j_{sa}^s)!}{(n_i + j_s - n - \mathbb{K} - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(n - s)!}$$

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

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

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

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

$$\mathbf{l}_{sa} - j_{sa} + 1 > \mathbf{l}_s \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_t \leq D + s - \mathbf{n})) \wedge$$

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz_{DOSD}^{j_{sa}} = \sum_{k=1}^{i^t} \sum_{i_s=2}^{i^t-k+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{i^t-k+1} \sum_{n_i=\mathbf{n}}^{(n_i-j_s)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \sum_{k=i}^{()} \sum_{j_s=1}^{\mathbf{l}_{sa}-i} \sum_{j_{sa}=j_{sa}}^{i^{l+1}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k + 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-s)!} \\
& \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_s-s)!} \cdot \\
& \sum_{k=0}^{\mathbf{n}} \sum_{(j_s=1)}^{\mathbf{n}} \sum_{j_{sa}=j_{sa}}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=n_i+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{\mathbf{n}} \\
& \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}
\end{aligned}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1) \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

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

$$D + j_{sa} - \mathbf{n} \leq l_{sa} \leq D - (l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

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

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

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

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

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

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

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right.$$

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

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

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

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

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

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

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

$$\left(\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

$$\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=\mathbf{l}_s+j_{sa}-k+1}^{\mathbf{l}_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^{s-1}}^{(\quad)} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}-\mathbb{k})}^{(\quad)}$$

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

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

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

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

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

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

$$l_{ik} - j_{sa}^{ik} + \mathbf{n} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

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

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

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

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

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

$$D + j_{sa} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz^{OSD}_{j_{sa}} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{j_s-k+1} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-j_s}^{l_{sa}-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(j_s - l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
 \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} \epsilon_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{(l-1)} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}}^{n_i} \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=1}^{()} \sum_{l}^{()} \sum_{j_s=1}^{()} j^{sa}=j_{sa} \end{aligned}$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz S_{j_s}^{CD} = \sum_{k=1}^{l_s-1} \sum_{(j_s=j_s^a-j_{sa}+1)}^{l_{sa}-k+1} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}}^{n_i-j_s} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=1)}^{()} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

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

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

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

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

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

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

$$\frac{(n_{ik} - s - k)!}{(n_{is} + j_{sa}^s - n - k - j_{sa}^i)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

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

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

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

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

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

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

$$l_i \leq D - (s - n) \wedge$$

$$D \geq n < n+1 \wedge l = k = 0 \wedge$$

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i_l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - i_s - k + 1)!}{(l_s - i_s - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i_l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} - \\
& \sum_{k=1}^{i_l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

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

$$\begin{aligned}
& (D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge \\
& 1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge n_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
& (D + s - l_i < l_i \leq D + j_{sa} + s - \mathbf{n} - j_{sa})) \wedge \\
& D \geq \mathbf{n} < n \wedge l_s = 0 \wedge \\
& j_{sa} \leq j_{sa}^i \leq j_{sa}^s \leq j_{sa} - 1 \wedge \\
& \{j_{sa}^s, \dots, j_{sa}^i\} \wedge \\
& s \geq 3 \wedge \mathbf{s} = s \Rightarrow
\end{aligned}$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

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

$$\sum_{k=\mathbf{l}}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

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

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

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

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

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

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

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_{s, j^{sa}}^{i, DSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(\mathbf{l}_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\) \\ n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-l_i)!}$$

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

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

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

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

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

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

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

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_{\mathbf{Z}}^{S, SD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=\mathbf{n}}^n \sum_{n_{is}=\mathbf{n}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

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

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}$$

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

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

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

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

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

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j_s-j^{sa})}$$

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

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

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

$$\frac{(l_s - k - 1)!}{(j^{sa} - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

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

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

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

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

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

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

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

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

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

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - j_{sa}^{s-1} - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - \mathbb{k})!}{(l_s - j_{sa} - k + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

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

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

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

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

$$D \geq l_s < n \wedge I = \mathbb{k} = 1 \wedge$$

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

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

$$s \geq 3 \wedge s = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} - s - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

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

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

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

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

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

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{i^l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s+1}^{l_i+j_{sa}-k-s+1} \\ & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} + \\ & \sum_{k=1}^{i^l-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\ & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \end{aligned}$$

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

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

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

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

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

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

$$l_i \leq D + s - \mathbf{n}) \vee$$

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

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

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

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

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j_s-j^{sa})}$$

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

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

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

$$\frac{(l_s - k - 1)!}{(j^{sa} - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{i l-1} \frac{(l_{ik} - k - 1)!}{(j_s^{sa} - k)!} \sum_{j^{sa}=j_s+j_{sa}}^{n_{ik}-k} \frac{(n_i - j_s + 1)!}{(n_i - \mathbf{n} + \mathbb{k} - j_s + 1)!} \cdot$$

$$\sum_{n_{ik}=n_{is}+j_s^s}^n \frac{(n_{sa} - n_{ik} - j_{sa}^{lk} - j_{sa} - \mathbb{k})!}{(n_{is} + j_s^s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

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

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

$$\sum_{k=1}^{i l} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \bigg) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz^{S_{j_{sa}}^{RSD}} = \sum_{k=1}^{l_{sa}+n-D-j_{sa}} \sum_{(j_s=2)}^{l_{sa}-k+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s = \mathbf{l}_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(\mathbf{l}_{ik} - k - j_{sa}^{ik} + 2)} \sum_{j^{sa} = j_s + j_{sa} - 1}^{\mathbf{l}_{sa} - k + 1}$$

$$\sum_{n_i = \mathbf{n}}^n \sum_{(n_{is} = \mathbf{n} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{is} - \mathbf{n} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - \mathbf{n} - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - \mathbf{n} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(j_s - k - 1)!}{(j_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s = 1)}^{(\)} \sum_{j^{sa} = \mathbf{l}_{sa} + \mathbf{n} - D}^{\mathbf{l}_{sa} - i^{l+1}}$$

$$\sum_{n_i = \mathbf{n}}^n \sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_i - j^{sa} + 1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{is}-s-l_k)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{(n_i-j_s+1)} \\
& \frac{(n_{is}-s-l_k)}{(n_{is}+j_s-n-l_k-j_{sa}^s+(n+j_{sa}^s-j_s))!} \cdot \\
& \frac{(l_s-l_k-1)!}{(l_s-l_k+1)! \cdot (j_s-2)!} \\
& \frac{(D-l_k)!}{(D+j_{sa}^s+s-n-l_k-j_{sa}^s)(n+j_{sa}-j_{sa}^s-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - j_{sa} - 1$$

$$D + n < n \wedge l_k = l_k = 0$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa} - 1$$

$$s \in \{j_{sa}^s, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = j_{sa}^i$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOSD} &= \sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{i=0}^{l-1} \sum_{j_s=1}^{l-k+1} \sum_{j_{sa}=1}^{l-k+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^{n-j_s+1} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=0}^{l-1} \sum_{j_s=1}^{l-k+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j^{sa}+1)}$$

$$\begin{aligned}
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - l_s + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_s+j_{sa}-n-l_{sa})} \sum_{(n_{ik}=l_{ik}+n+j_{sa}-D-l_s-k)}^{(l_s+j_{sa}-n-l_{sa})} \sum_{(n_i=n+l_{ik}(n_{is}-j_s+1))}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s^{ik}-j_{sa}^{ik}(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_{ik}))}^{(n_i-j_s+1)} \\
& \frac{(n_{is} - l_{ik} - s - l_{ik})!}{(n_{is} + j_s^{ik} - n - l_{ik} - j_{sa}^{ik})! \cdot (n + j_{sa}^{ik} - s - j_s^{ik})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{ik} + j_{sa}^{ik} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=0}^{l_s} \sum_{l=0}^{(j_s=1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_{ik}-j_s+1}^{(n_{is}=j_s+1)}$$

$$\frac{(n_i - j_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - j_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{j_s=l_{ik}+n-D-j_{sa}^{lk}+1}^{D+l_s+j_s-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{lk}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-l_{ik})}^{(j_s=1)}$$

$$\frac{(n_{is} - s - l_{ik})!}{(n_{is} + j_s - n - l_{ik} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}; \{j_{sa}^s, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_s + j_{sa} - k} \sum_{j^{sa} = \mathbf{l}_i + \mathbf{n} + j_{sa} - D - s}^{n_{is} + j_s - j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_s-k)} \sum_{j^{sa}=l_i+j_{sa}-n-s+1}^{l_i+j_{sa}-n-s+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s+1}^{n_{sa}+j_s-j^{sa}} \sum_{j^{sa}=1}^{j^{sa}+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(l_s-k)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-i^{l-s}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}.$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} -$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \binom{l_s+j_{sa}-k}{j_s+j_{sa}-j_{sa}+1} j^{sa} = l_t + n + j_{sa} - D - s$$

$$n_i = n - (n_{iS} = n + k - j_S + 1)$$

~~$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}} (n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})$$~~

$$\frac{(n_{is} + s - \mathbb{k})!}{(n_{is} + s - \mathbf{n} - \mathbb{k} - j_s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - \mathbf{l}_i)!}{(D - j^{sa} + \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} - l_s \wedge l_a = j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

$$(D \geq n < \infty) \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz^S_{j_s, j_{sa}} = \sum_{k=1}^{j_s-1} \sum_{j_s=2}^{j_s-1} \sum_{j^{sa}=l_{sa}+n-D}^{j_s-1} \sum_{n_i=n}^{n_i-j_s} \sum_{n_s=n-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - n_{sa} - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^n \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l^{l+1}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-\mathbf{n}-1)! \cdot (\mathbf{n}-2)!} \cdot$$

$$\frac{(D-l_i)}{(D+j_{sa}+s-\mathbf{n}-l-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^{sa}-1)!} \cdot$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+\mathbf{n}-D-s)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\
 & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}-j_s-j_{sa}+1)!}{(j_s+l_{sa}-j_s-l_s)! \cdot (j^{sa}-j_s-j_{sa}+1)!} \cdot \\
 & \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
 & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot
 \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{(l_s - j_s - 1)} \sum_{(j_s=1) \atop (j^{sa}=l_i+n-D-s)}^{(l_i+j_{sa}-l_s+1)} \frac{(n_i - j_s - 1)!}{(n_i - n_{sa} - j_s + 1)!} \cdot \frac{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(l_s - l_s - j_{sa} + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \sum_{k=1}^{(D+j_{sa}-n-l_{sa})} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-k+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(l_s-k+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(l_s-k+1)} \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} j_s^{DOSD} j_{sa}^{sa} &= \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \\ &\sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{sa}+\mathbf{n}-D}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \Bigg) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \quad \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \quad \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} + \\
& \quad \left. \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \right. \\
& \quad \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \left. \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \right)
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_s^{sa}+1}^{n_{is}+j_s-j_s^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot \\
& \frac{(n_{is} - n_{is} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (j_{sa} - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} + 1)!}{(D + l_{sa} - j_{sa} - s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) - \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_i} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} j_{sa}^{DOSD} = & \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \\ & \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \quad \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \quad \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \quad \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j^{sa}+1}^{n_{is}+j_s-j^s} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot \\
& \frac{(n_{is} - n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} + 1)!}{(n + l_{sa} - j_{sa} - s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} j_s^{sa} = & \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \\ & \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}+1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(\mathbf{l}_s-k+1)} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j_s^s} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - \mathbf{n} + 1)!} \cdot \\
& \frac{(n_{is} - \mathbf{n} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - \mathbf{n} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} + j_s - \mathbf{n} - 1)!}{(j_s - 1)! \cdot (n_{sa} - \mathbf{n} - j^{sa})!} \cdot \\
& \frac{(j_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{sa} - \mathbf{n} - j_{sa} + 1)!}{(\mathbf{l}_{sa} + \mathbf{l}_{sa} - j_{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{D+\mathbf{l}_s+\mathbf{n}-\mathbf{l}_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa} - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} j_{sa}^{DO} j_{sa}^{SD} &= \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \\ &\sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \quad \frac{(D + j_s - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \quad \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} + j_s - n - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}^{\mathbb{K}}, j_{sa}^{\mathbb{K}}, \dots, j_{sa}^i\},$$

$$s \geq 3 \wedge \mathbf{s} = s + 1 \wedge$$

$$\mathbb{K}_z: z \geq 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_s+j_{sa}-k} \right. \\ \left. \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \right).$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_s+j_{sa}-k}^{j^{sa}+j_{sa}-k} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{j_s=\mathbf{n}-D}^{(l_s-1)} \sum_{j^{sa}=l_{sa}+1}^{l_{sa}+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} j^{sa+1} \cdot \\
& \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{j_s=j^{sa}-j_{sa}+1}^{(\quad)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}^{(\cdot)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-k+1)!}$$

$$\frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^s-s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge s = \mathbb{k} > s \wedge$$

$$j_{sa}^{s-1} \neq j_{sa}^{s-1} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}^{s-1}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right)$$

$$\begin{aligned}
& \sum_{(j_s=l_s+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \left. \sum_{k=1}^{(D + j_{sa} - n - l_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_s-n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j^{sa} - j_s - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D}^{D-n+1} \sum_{(j_s=l_{sa}+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s-1}}^{(n_{is}-s-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{(n_{is}-s-\mathbb{k})}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + \mathbf{n} - \mathbf{n} - \mathbf{l}_i - j^{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + \mathbb{k} = l_s \wedge l_{is} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I - \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}^{s-1}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \mathbf{n} + 1 = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 =$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s - j^{sa} - j_{sa} - l_i + l_{sa} - D - s)}^{()} \sum_{l_{sa}=k+1}^{l_{sa}-k+1} \sum_{n_i=n+1}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - j^{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j^{ik}}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{sa}+1)!}{(j^{sa}-j_s+1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa})!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\
 & \frac{(\mathbf{l}_s-k-1)!}{(\mathbf{l}_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(D+j_s-\mathbf{l}_{sa}-s)!}{(D+j^{sa}-\mathbf{n}-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} \cdot \\
 & \sum_{k=1}^{D+\mathbf{l}_s+\mathbf{n}-\mathbf{l}_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
 & \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \\
 & \frac{(\mathbf{l}_s-k-1)!}{(\mathbf{l}_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(D-\mathbf{l}_i)!}{(D+j^{sa}+s-\mathbf{n}-\mathbf{l}_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{i,j_{sa}}^{DOS} = \sum_{k=1}^{D-n+1} \sum_{l_i=j_{sa}-j_s+1}^{j_{sa}-k} \sum_{j_{sa}=l_s+n+j_{sa}-D-1}^{j_{sa}-k} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

$$\frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}^{(\cdot)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_s^{sa}-s)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_{sa}^{ik} - s > l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{\mathbf{s}, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s_{ik}}} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{(n_{is}-s-\mathbb{k})}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - n_{is} - \mathbb{k})!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + j_{sa} - 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l_s - \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^{s-1}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-k+1)} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa})} \\
 &\frac{(n_{is}-n_{sa}-1)!}{(j_s-2)! \cdot (n_i-n_{sa}+1)!} \cdot \\
 &\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
 &\frac{(n_{sa}-1)!}{(n_{sa}+j_s-n-1)! \cdot (n-j^{sa})!} \cdot \\
 &\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 &\frac{(D+j_s-l_{sa}-s)!}{(D+j^{sa}-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} - \\
 &\sum_{k=1}^{D+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-k+1)} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
 &\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \\
 &\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 &\frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: Z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{j_s=\mathbf{l}_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1}^{(j^{sa}-j_{sa}+1)} \sum_{j_{sa}=\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1}^{\mathbf{l}_i+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^{(j_s-\mathbf{l}_{ik}+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(j_s-\mathbf{l}_{ik}+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(i - \mathbf{l}_{ik} - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{D-\mathbf{n}+1} \sum_{j_s=\mathbf{l}_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_i+j_{sa}-k-s+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} + 1)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-l_{sa}} \sum_{(j_s-j_{sa}+1) \leq l_{ik} \leq j_s} \sum_{(j^{sa}-j_{sa}+1) \leq l_i \leq j^{sa}} l_{ik}^{ik+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n - l_s > D - n + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+j_{sa}-k-s+1}^{l_i+j_{sa}-k-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i-j_s-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_s-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j^{sa}-l_{sa}-j^{sa}-l_s)! \cdot (j^{sa}-j_s-j_{sa}+1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s++1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \frac{(l_{ik}-k-j_{sa}^{ik})!}{(j_s=l_i+n-j_{sa}^{ik}+1) \cdot j^{sa}=j_s+j_{sa}^{ik}} \cdot \\
& \sum_{i=1}^n \frac{(n_i-j_s+1)!}{(n_i=n+l_k \cdot (n_{is}-j_s+1))} \cdot \\
& \sum_{i_k=n_{is}+j_{sa}^{ik}}^{(n_{is}-j_s+1)} \frac{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)!}{(n_{is}+j_{sa}^{ik}-n-l_k-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D - n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D - n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \bigg) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik})}^{(j^{sa}-j_{sa}+1)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{ik}+j_s-k-j_{sa}^{ik}+1)} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{sa}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i-j_s+1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j_s+l_{sa}-j^{sa}-l_s)! \cdot (j^{sa}-j_s-j_{sa}+1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} + \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{sa}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1-l_s)}^{(j_s=j^{sa}-j_{sa}+1-l_s)} \sum_{(n_i=n+l_s-j_s+1)}^{(n_i=n+l_s-j_s+1)} \sum_{(n_{is}=n+l_s-j_s+1)}^{(n_{is}=n+l_s-j_s+1)} \sum_{(n_{sa}=n+l_s-j_s+1)}^{(n_{sa}=n+l_s-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa}) \bigg) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(\mathbf{l}_{sa}+\mathbf{n}-D-j_s)} \sum_{j^{sa}=\mathbf{l}_{sa}-j_s+D}^{\mathbf{l}_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{j^{sa}+1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - n_{is} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(\mathbf{l}_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\mathbf{l}_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \end{aligned}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{i=0}^{(l_{ik}-k-j_{sa}^{sa})} \sum_{j_{sa}=j_s-1}^{j_s+l_{sa}-l_i+n-l_i} \sum_{n_i=n+l_i}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_i}^{(n_{is}=n+l_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-l_k)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-l_k)}^{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-l_k)}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_i \geq D - l_i + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - s \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+1}^n \sum_{j_s=j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=j_s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n+l_{sa}-j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s) \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s \cdot j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: Z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{\mathbf{n}+1} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(l_s-1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_{sa}^{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_{is}-s-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^{ik})! \cdot (n+j_{sa}-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-s)!}{(D+j_{sa}+s-n-l_{sa}-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-k}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n}^n \sum_{n_i=n}^{(n+j_s+1)} \sum_{n_i=n}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=1}^{()} \sum_{n_{sa}=l_i+j_{sa}-j_{sa}-k}^{()} \sum_{n_{ik}=1}^{()} \sum_{n_{sa}=l_i+j_{sa}-j_{sa}-k}^{()}$$

$$\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z \mathcal{S}_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D-s+1)}^{(l_i+\mathbf{n}-D-s)} \sum_{j_{sa}=l_i+j_s-k-s+1}^{l_i+j_s-k-s+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} + \\ & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-l_{sa}-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-l_{sa}-j_s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{sa})}^{(n_{ik}-j_{sa})}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}}^{(n_{ik}-j_{sa})} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{(n_{sa}-j_{sa}-l_k)}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} - s - l_k - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa}) \bigg) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{n} \geq 0 \wedge$$

$$j_s \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq 3, \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\begin{aligned}
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-\mathbf{n}+1} \sum_{i=l_s+1}^{(l_s-k+1)} \sum_{j_{sa}=l_{sa}-k+1}^{(l_{sa}-k+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\quad)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-l_s)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^s-s)!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{K} \wedge$$

$$\mathbb{K}_Z: Z = 1 \Rightarrow$$

$$S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{n+1} \sum_{l_s=l_s+n-D-j_{sa}}^{(l_{sa}-D-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_s + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - j_{sa} - 1)!}{(\mathbf{n} + l_{sa} - j^{sa} - l_s)! \cdot (\mathbf{n} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{\mathbf{n}+l_s+s-\mathbf{n}-l_i} \sum_{(i=\mathbf{n}-D-s+1)}^{-(k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{l-1} \sum_{(j_s=j_{sa}-k+1)}^{()} \frac{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}+1} \right. \\ \sum_{i=n+k}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-k-j_s+1)}^{(n_{is}+j_s-j_{sa}-k)} \sum_{j_{sa}^{sa}+1}^{(j_{sa}-1)} \frac{(n_i-j_s+1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\ \frac{(n_i-n_{sa}-1)!}{(j_{sa}-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa})!} \cdot \\ \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \\ \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ \left. \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} + \right. \\ \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j_{sa}=j_{sa}}^{()} \\ \sum_{n_i=n+k}^n \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{sa}-k+1)} \frac{(n_i-n_{sa}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+1)!} \cdot \\ \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} - s)!} \Bigg) + \\
& \left(\sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(D + \mathbf{l}_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_s - 1)!}{(n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
& \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\mathbf{l}}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}-j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa})!}{(n_i + j_s - \mathbf{n} - \mathbb{k} - j_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1,$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_s\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = \mathbf{n} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \mathbf{s} = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{i\mathbf{l}-1} \sum_{(j_s=2)}^{(\mathbf{l}_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(n_{sa}-j_s+1)} \sum_{j_{sa}=j_s}^{(n_{sa}-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - s)!} + \\
& \left(\sum_{k=1}^{i^l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right) \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=\mathbf{l}}^{(\quad)} \sum_{(j_s=1)}^{\mathbf{l}_{sa}-\mathbf{l}+1} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_{sa}-\mathbf{l}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_s=\mathbf{n}+j_{sa}+1)}^{(n_i-j^{sa}-\mathbb{k})} \\
& \frac{(n_i - \mathbf{n}_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - \mathbf{n}_{sa} - 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(j^{sa} - \mathbf{l}_s - 1)!}{(j^{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa})!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{\mathbf{l}-1} \sum_{(j_s=2)}^{(\mathbf{l}-k-j_{sa}^{lk}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\mathbf{l}-k-j_{sa}^{lk}+2} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=\mathbf{l}}^{(\quad)} \sum_{(j_s=1)}^{\mathbf{l}} \sum_{j^{sa}=j_{sa}}^{\mathbf{l}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right)$$

$$\sum_{\binom{()}{(j_s=j_{sa}-j_{sa}+1)}} \sum_{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_s}^{l_{ik}+j_s-k-j_{sa}^{ik}+1} \frac{(j^{sa}-j_s-1)!}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{l-1} \sum_{j_s=l_s}^{(l_{ik}-k-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{()} \sum_{j_s=1}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \frac{(n_i - j^{sa} - k + 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \frac{l_{ik}+j_s-k-j_{sa}^{ik}+1}{(j_s=j^{sa}-j_{sa}+1) \cdot j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s} \cdot \\
& \sum_{n_i=\mathbf{n}+j_{sa}-j_s+1}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{()} \cdot \\
& \sum_{n_{ik}=n_i+j_s-j_{sa}-j_s^{ik}+j_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{()} \cdot \\
& \frac{(n_{is}+s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa})! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_i \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa}$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_s - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D - j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} - j_{sa}^s - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right. \\
& \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \left. \frac{(D+l_s+j_{sa}-n-l_{sa}-s)!}{(D+l_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \right) + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \left. \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \right)
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{j_s=l_i}^{()} \sum_{j^{sa}=n-D}^{n-l_i+1} \frac{(n-l_i+1)!}{(n-l_i-j_s+1)!} \cdot \\
& \frac{(n_{sa} - j_{sa} - 2)!}{(n_{sa} - j_{sa} - 1)! \cdot (n - j^{sa} + 1)!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_j^{l_{sa}} S_{sa}^D &= \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right. \\ &\quad \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\ &\quad \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{K}}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\quad \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_{is} - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(\mathbf{l}_s-k+1)} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{\mathbf{l}_{sa}-i^{l+1}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^{s})! \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D+l_s)!}{(D+j^{sa}+s-n+l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1$$

$$D \geq n < n, n = \mathbb{k} \geq 1$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa} - 1$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}^{i-1}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = \mathbb{k} \wedge$$

$$\mathbb{k}_2 = \mathbb{k} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

$$\sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{j_s=\mathbf{n}-j^{sa}+1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1} \sum_{j_s=\mathbf{n}-j^{sa}+1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=2}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{\binom{D}{\mathbf{l}}} \sum_{(j_s=1)}^{\mathbf{l}_{ik}+j_{sa}-\mathbf{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_s=\mathbf{n}+j_{sa}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k})}$$

$$\frac{(n_i - j_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - j_{sa} - 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot$$

$$\frac{(j_{sa} - \mathbf{l}_s - 1)!}{(j_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j_s - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - \mathbf{l}_{sa})!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=1}^{D+\mathbf{l}_{sa}-\mathbf{n}-\mathbf{l}_i} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{j_s-k+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{\binom{D}{\mathbf{l}}}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^1, j_{sa}^2, \dots, j_{sa}^s\} \wedge$$

$$s \geq 3 \wedge s = 1 + \mathbb{K} \wedge$$

$$\Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)} l_s + j_{sa} - k \sum_{j^{sa}=j_{sa}+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_s=2)}^{i l_s - l_s - k + 1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=0}^{\infty} \sum_{i=1}^{(l)} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - \mathbb{k} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - i^{l+1} - j_{sa} + 1)!}{(l_{sa} - i^{l+1} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - n - l_{sa})!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j^{sa}-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{l_s-1} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(l_s)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=0}^{\infty} \sum_{i=1}^{(l)} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ (n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1)}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (n-l_i)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j_{sa}=j_s + j_{sa} - 1}^{l_{sa} - k + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{is}+j_{sa}-\mathbb{k})}$$

$$\frac{(n_i - j_s - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j^{sa} - l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa} - i^{l+1}} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-j_s+1)} \sum_{n_i=\mathbf{n}+1}^n \sum_{n_{ik}=\mathbf{n}+j_{sa}-j^{ik}+1}^{(n-j_s+1)} \sum_{n_{sa}=\mathbf{n}+j_{sa}-j_{sa}-l_k}^{(n-j_s+1)} \frac{(n_{is} - l_k)!}{(n_{is} + j_s - \mathbf{n} - l_k - j_{sa})! \cdot (\mathbf{n} + j_{sa} - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}}^{(n-j_s+1)} \sum_{n_i=\mathbf{n}+l_k}^n \sum_{(n_{ik}=\mathbf{n}+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n-j_s+1)} \sum_{n_{sa}=\mathbf{n}+j_{sa}-j_{sa}-l_k}^{(n-j_s+1)} \frac{(n_i + j_s - s - l_k - j_{sa}^s)!}{(n_i + j_s - \mathbf{n} - l_k - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa} = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^1, j_{sa}^2, \dots, j_{sa}^i\},$$

$$s \geq 3 \wedge s = 1 + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: \dots \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{i-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - s)!} + \\
& \sum_{i=1}^{(j_s)} \sum_{j_s=2}^{(j_s)} \sum_{j^{sa}=j_{sa}}^{(j_s)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \right) + \\
& \left(\sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_s - k + 1} j^{sa} = l_s - k + 1 \\
& \sum_{n_i = n - k}^n \sum_{(n_{is} = n + k - j_s)}^{(n - j_s + 1)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n - j^{sa} - k)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{sa} - 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=1)}^{l_s - k + 1} \sum_{j^{sa} = j_{sa} + 1}^{l_{sa} - i^{l+1}} \\
& \sum_{n_i = n + k}^n \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - j^{sa} - k + 1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)}$$

$$\sum_{n_{ik}=n_i+j_{sa}-j^{sa}+1}^{\quad} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa})! \cdot (\mathbf{n} + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{n})!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa}^s)!}{(n_i + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa} = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^1, j_{sa}^2, \dots, j_{sa}^i\},$$

$$s \geq 3 \wedge s = 1 + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: \dots \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - s)!} + \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(j_s = 2)}^{(l_s - k + 1)} \sum_{j^{sa} = j_s}^{(n_i - j^{sa} - \mathbb{k} + 1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \right) + \\
& \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_{sa}-i^{l+1})} \sum_{j^{sa}=j_s+1}^{j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_s - 1)!}{(n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(l_{sa}-i^{l+1})} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\mathbf{l}_i}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} n_{sa=n_{ik}-j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa})!}{(n_i + j_s - \mathbf{n} - \mathbb{k} - j_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa}$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{ik} \leq D + \mathbf{l}_s + j_{sa}^{ik} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 PQSD = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=2}^{l_s+j_{sa}-k} \sum_{j^{sa}=l_{sa}+n-D}^{j^{sa}-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j^{sa}-k} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \right. \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k} \right)
 \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=1}^{D+l_s+j_{sa}-\mathbf{n}-l_s} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - l_s - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{l_s+j_{sa}-k}^{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}-j_s-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}-j_s)!}.$$

$$\frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_s - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_s) \vee$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_s - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D+l_s-n-l_{sa}} S_{j_s, j_{sa}}^{DOS} \\ & \sum_{j_s=j_{sa}+n-D-j_{sa}+1}^{(l_s-j_s+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_s-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^{s})! \cdot (\mathbf{n}+j_{sa}-j_s)!}.$$

$$\frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(D-l_s)!}{(D+j_{sa}+s-n-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa}^{ik} - \mathbf{n} - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} - l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D > \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D-j_s-k+1}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{(i=1)}^{n-i} j^{sa} = l_i + n - D \\
& \sum_{n_i=n+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_s - 1)!}{(n_{sa} - j_s - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+1}^n \sum_{n_{is}=n+1-k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-1)}^{()} \\
& \frac{(n_{is} - s - 1)!}{(n_{is} + j_s - n - 1 - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_{z=1}^{POSD} = & \sum_{k=1}^{l_s} \sum_{j_s=j^{sa}-j_{sa}+1}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_s+1)}^{(i)} \sum_{j^{sa}=j_{sa}+1}^{j^{sa}+1}$$

$$\sum_{n_{ik}=n_{is}+j^{sa}-j_s+1}^{n_{ik}=n_{is}+j^{sa}-j_s+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}=n+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j^{sa}-j_s+1}^{(i)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(i)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{(i)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(i)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa}^s)!}{(n_i + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=0}^{l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{-(j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \sum_{k=0}^l \sum_{(j_s=1)}^{()} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_i-j^{sa}-\mathbb{k}+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_{sa}^s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s - j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} - \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}
 \end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot$$

$$\frac{(l_s-k-\mathbb{k})!}{(l_s-j_s-\mathbf{n}-1)! \cdot (\mathbf{n}-2)!} \cdot$$

$$\frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} \cdot$$

$$\sum_{k=\mathbb{k}}^{\mathbf{l}} \sum_{(j_s=1)}^{\mathbf{l}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_{ik}=\mathbf{n}+\mathbb{k}}^{\mathbf{l}} \sum_{(n_{ik}=\mathbf{n}+j_{sa}-j_{sa}^{ik}+\mathbb{k}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot$$

$$\frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}$$

$$(D \geq \mathbf{n} < n \wedge l_i \leq D - \mathbf{n} - 1 \wedge$$

$$1 \leq j_{sa} \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - \mathbb{k} \leq j^{sa} \leq \mathbf{n} - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - \mathbf{n} - l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa})) \wedge$$

$$l_{sa} \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=i l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} - \\
 & \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{sa}-k+1}
 \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-j_{sa}^s-1)!}{(l_s-j_s-\mathbf{n}-1)! \cdot (s-2)!} \cdot \\
& \frac{(D-l_i)}{(D+j_{sa}+s-\mathbf{n}-l-j_{sa})! \cdot (n_{is}-j_{sa}-j_{sa}^s-\mathbb{k})!} \cdot
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} - l_i + j_{sa} - j_{sa} = -sa \wedge$$

$$l_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge l - l_i \geq 0 \wedge$$

$$j_s \leq j_{sa} - j_{sa} + 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 3, \mathbb{k} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - l_{sa} - s)!} \cdot \\
& \sum_{i=1}^{l_s} \sum_{j_s=1}^{()} j^{sa} \cdot \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} j^{sa+1} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \cdot \\
& \sum_{k=1}^{i^{l-1} (l_{sa}-k-j_{sa}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{()} \sum_{n_{sa}=n_{ik}-j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa})!}{(n_i + j_s - n - \mathbb{k} - j_{sa})! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}, j_{sa}\} \cup \{j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_Z: Z = \dots \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - \mathbf{l}_{sa} - s)!} \cdot$$

$$\sum_{i=1}^{()} \sum_{j_s=1}^{()} j^{sa} \cdot$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} j^{sa+1}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\sum_{k=1}^{i\mathbf{l}-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{()} \sum_{n_{sa}=n_{ik}-j_{sa}^{ik}-j_{sa}-l_k}$$

$$\frac{(n_i + j_s - s - l_k - j_{sa})!}{(n_i + j_s - n - l_k - j_{sa})! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, l_k, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + l_k$$

$$l_k: Z = \dots \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\begin{aligned}
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \frac{(l_{ik} - k - j_{sa}^{ik} + 2)!}{(l_{ik} - k - j_{sa}^{ik} + 2)! \cdot (j_s - j_{sa}^{ik} - j_{sa}^{ik} + 2)!} \cdot \sum_{n_i = \mathbf{n} + \mathbb{k}}^{l_i + j_{sa} - k - s + 1} \frac{(n_i - j_s - j_{sa}^{ik} + 2)!}{(n_i - j_s - j_{sa}^{ik} + 2)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^{(n_i - j_s - j_{sa}^{ik} + 2)!} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_i - j_s - j_{sa}^{ik} + 2)!} \frac{(n_i - n_{is} - 1)!}{(n_i - j_s - j_{sa}^{ik} + 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{j_s=1}^{(l_i + j_{sa} - k - s + 1)} \sum_{j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s}^{l_i + j_{sa} - k - s + 1} \cdot \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_i - j^{sa} - \mathbb{k} + 1)!}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - l_s)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+n+j_{sa}-l_{sa}-k)}^{(n)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}+1, \dots, n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik})}^{(n)} \sum_{(n_i=n+l_{sa}-j_{sa}^{ik}-j_s+1, \dots, n_i=n+l_{sa}-j_{sa}^{ik}-j_s+1)}^{(n_i-j_s+1)} \\
& \frac{(n - l_s - \mathbb{k})!}{(n_{is} + j_{sa}^{ik} - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^i - j_{sa} + 1$$

$$j_s + j_{sa}^i - 1 \leq j_{sa}^i + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^i = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{ik} + j_{sa}^{ik} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_{sa} + \mathbf{n} - D}^{n_{is} + j_s - j^{sa}} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j^{sa}=l_{ik} + j_{sa} - k - j_{sa}^{ik} + 2}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{(j_s - l_s + 1)} \sum_{i=1}^{(j_s - l_s + 1)} \sum_{j^{sa}=l_{sa}+n-D}^{j^{sa}=l_{sa}+n-D} \\
& \sum_{n_i=n+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i - j_s + 1)} \\
& \frac{(n_i - j_s - 1)!}{(n_{sa} - j_s - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+1}^n \sum_{n_{is}=n+1-k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(j_s-j_{sa}+1)} \\
& \frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j}^{D-s} &= \sum_{k=1}^{l-1} \frac{(l_i - D - s)!}{(k-2)!} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_i+j_{sa}-i^{l-s+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})} \sum_{(n_{is}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s-j_{sa}+j_s)!} \cdot \frac{(n+j_{sa}-j_s)!}{(l_s-k-1)!} \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-j_s)!}{(D+j^{sa}+s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \vee$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} l_{ik+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} l_{sa-k+1} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{\binom{()}{l}} \sum_{j_s=1}^{\mathbf{l}_{sa} - \mathbf{l} + 1} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j^{sa}-\mathbb{K})} \\
& \frac{(n_i - \mathbf{n}_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - \mathbf{n}_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(j^{sa} - \mathbf{l}_s - 1)!}{(j^{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j_s - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\binom{()}{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{\binom{()}{l}} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{K})}^{\binom{()}{l}} \\
& \frac{(n_{is} - s - \mathbb{K})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{K} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\binom{()}{l}} \sum_{j_s=1}^{\binom{()}{l}} \sum_{j^{sa}=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ (n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1)}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} \leq l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} \leq l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbf{n} - 0 \wedge$$

$$j_s \leq j_{sa}^i - 1, j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{0, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$j_s \geq 3 \wedge l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{j_s=2}^{l_{sa}-i^{l-1}} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^{l-1}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-i^{l-1}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s - l_i)!}.$$

$$\sum_{k=0}^{(j_s)} \sum_{l=0}^{(j_s - k)} \sum_{j_{sa}^s = j_{sa} - k - l}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^{\mathbf{n}} (n_{ik} = n_i + j_s - j_{sa} - j_{sa}^{ik} + 1) n_{is} = n_i + j_{sa} - j_{sa}^{ik} - \mathbb{k} \\ \frac{(j_s + j_{sa} - \mathbb{k} - j_{sa}^s)!}{(j_s - k - l - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}.$$

$$\begin{aligned} & ((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1) \wedge \\ & 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - \mathbf{n} \leq l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee \\ & ((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1) \wedge \\ & 0 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik})) \wedge \\ & D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge \end{aligned}$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{i=1}^{n-l+1} \sum_{j^{sa}=n-D}^{n-l+1} \\
& \sum_{n_i=n-l+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_s - 1)!}{(n_i - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
& \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & S_{l_s, j_{sa}}^{DOSL} \sum_{i=0}^{l-1} \sum_{(j)}^{(j^{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)} l_{ik+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{ik+j_{sa}-i^l-j_{sa}^{ik}+1}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-l_k+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s) \cdot (n+j_{sa}-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-l_s)!}{(D+j_{sa}+s-n-\mathbb{k}-j_{sa}) \cdot (n+j_{sa}-j_{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - n - 1$$

$$D > n < n \wedge n = \mathbb{k} \geq 0$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa} - 1$$

$$s; \{j_{sa}^s, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_{j_{sa}} = j_{sa} - s$$

$$\begin{aligned}
f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l_s} \sum_{(j_s=l_{ik}-D-j_{sa}^{ik}+1)}^{(l_s-1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}^{ik}+1} \\
& \sum_{n_{is}=n+l_k-j_s+1}^n \sum_{n_{sa}=n+l_k-j_s+1}^{n_{is}+j_s-j^{sa}-l_k} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{(j_s=1)}^{(l_s-1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}+1)}^{(l_s-k+1)} \sum_{(j_{sa}=\mathbf{n}-j_{sa}+1)}^{(D-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} - j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D - l_s) < \mathbf{n} \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s}^{DO} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(n - k - 1)!}{(n - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-i^{l-s}+1}$$

$$\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{K}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_s-\mathbb{k})}^{()} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_i-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-l_s)!}{(D+j_{sa}+s-n-l_s-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1} (j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{j_{sa} = l_s + j_{sa} - k} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}-j_s}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j_{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l_{sa}-l+1} \sum_{i=n+l_k}^{n+l_{sa}-j^{sa}-l_k+1} j^{sa}=l_{sa}+n+l_k-1 \\
& \sum_{i=n+l_k}^n (n_{sa}=n+l_k-j^{sa}+1) (n_{sa}=n+l_k-j^{sa}+1) \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - n_{sa} - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
& \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^l, l_{sa}^l, j_{sa}^s, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = j_{sa} + \mathbb{K} \wedge$$

$$\mathbb{K}_{Z,1} = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=0}^{l-1} \sum_{(j_s+\mathbf{n}-D-s+1)}^{-(k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\infty)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l_i^{s-1}+1}$$

$$\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{sa}=n-j_{sa})}^{(n_i-j_{sa}-\mathbb{K}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - \mathbb{K} - j_{sa} + 1)! \cdot (n_i - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j^{sa} - l_{sa} - \mathbb{K} - j_{sa} + 1)!}{(D + j^{sa} - l_{sa} - \mathbb{K} - j_{sa} + 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}-\mathbb{K}} \sum_{(j_s=l_s-k+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-D-s+1)}$$

$$\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{(\infty)}$$

$$\frac{(n_{is} - s - \mathbb{K})!}{(n_{is} + j_s - n - \mathbb{K} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \leq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \binom{D+l_s+j_{sa}-n-l_{sa}}{k} \sum_{j_s=l_{ik}+j_{sa}}^{(j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \binom{D+l_s+j_{sa}-n-l_{sa}}{k=1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}-k+1}^{l_{sa}-k+1} \frac{(n_i - j_s + 1)!}{(j_s - l_{ik} + \mathbf{n} - D - j_{sa}^{ik} + 1)!} \cdot \frac{(n_{is} + j_s - j^{sa} - \mathbb{k})!}{(n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \frac{(n_i - j_s + 1)!}{(j_s - l_{ik} + \mathbf{n} - D - j_{sa}^{ik} + 1)!} \cdot \frac{(n_{is} + j_s - j^{sa} - \mathbb{k})!}{(n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_s-j^{sa}-j_{sa}+1) \leq l_{ik} \leq l_{ik}^{ik}+1} \sum_{a=l_i+n+j_{sa}-D-s}^{l_{ik}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s - j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

$$(l_{ik}-k-j_{sa}^{ik}+1)$$

$$(j_s=l_{sa}+n-l_{sa}+1) \ j^{sa}=j_s+j_{sa}-1$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} j^{sa+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} j^{sa+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} j^{sa+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} j^{sa+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (n_{is} + j_{sa} - j^{sa} - 1)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{j_s=0}^{(l_{ik}-k-j_{sa}^{ik})} \sum_{j_{sa}=0}^{(n_{is}+j_s-\mathbf{n}-D-j_{sa}^{ik}-j_s-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}}^{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1} \sum_{n_{sa}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_{is}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik} \atop (n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{n} - D \geq \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq \mathbf{n} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_s+j_{sa}-k} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+l_s+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \right) + \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (\mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, j^{sa}=l_i+n+j_{sa}-1)}^{(l_s+j_{sa}-1)} \cdot$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \cdot$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{(n_{ik}=n_{is}+j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \cdot$$

$$\frac{(n_{is} + j_{sa}^{ik} - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}{(n_{is} + j_{sa}^{ik} - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$D \geq 1 \wedge n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$j_{sa} \geq n - l_{sa} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right. \\
 & \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} j^{sa} = j_s + j_{sa} - \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \left. \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \right)
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(j_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} j^{sa} = j_{sa}-1$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+k-j_s+1}^{(n_{is}=n-k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}}^{(n_{ik}=n_{is}+j_{sa}^{s}-j_{sa})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{is} - s - k)!}{(n_{is} + n - k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa}$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \bigg) \bigg) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=j_{sa}-j_{sa}}^{l_s} \sum_{j_{sa}=l_{sa}+n-D}^{l_s-k} \sum_{n_i=n}^n \sum_{n_{is}=n+l_s-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_{sa} - \mathbb{K} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{K})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k} \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_{sa} - \mathbb{K} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{K})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right)$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{i=l_s+1}^{l_s-k+1} \sum_{j_{sa}=l_{sa}-k+1}^{l_{sa}-k+1} \frac{(n_i - n_{is} - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} + j_s - j^{sa} - \mathbb{k})!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{j_s=l_s+\mathbf{n}-D}^{l_s-k+1} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_s - 1)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_s+j_{sa}+l_{sa}-j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)} \sum_{k=1}^{n_{ik}} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$l_s + j_s - j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\},$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{K} \wedge$$

$$\mathbb{K}_Z: Z = 1 \Rightarrow$$

$$f_{\mathbf{s}}^{\mathbf{s}, SD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}}$$

$$\sum_{(j_s=\mathbf{l}_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(\mathbf{l}_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(l_{sa} + l_{sa} - j_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-1}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s}^{(n_i-j_s-j^{sa}-\mathbb{k})} \\
& \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-1-\mathbb{k})!} \cdot \\
& \frac{(n_{sa}-n_{sa}-1)!}{(n_{sa}-n_{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\sum_{j_s=j^{sa}-j_{sa}+1}^{D-n+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot$$

$$\frac{(l_s-k-j_s+1)!}{(l_s-j_s-\mathbf{n}+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D-l_i)}{(D+j_{sa}+s-\mathbf{n}-l_s-j_{sa})! \cdot (n_{is}+j_s-j_{sa}-\mathbf{n})!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge \mathbf{n} + j_{sa} - s > 0 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = \mathbf{n} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{(\quad)} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \frac{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)!}{(j_s=j^{sa}-j_{sa}+1)! \cdot (j_s=j^{sa}-j_{sa}+1)!} \cdot$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^n \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j^{sa} - n - \mathbb{k} - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}}^n \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^n \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j^{sa} - n - \mathbb{k} - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$D \geq n < n_{sa} \wedge n_{sa} > D - n_{sa} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n_{sa} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s, \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s, \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_s+\mathbf{n}+j_{sa}-D-1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - j_{sa} - l_s - s)!}{(D + j^{sa} - \mathbf{n} - l_s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{s=1}^{D+l_s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(n-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(n_{is}+j_s-j_{sa}-1)} \frac{(n_{is}-j_s-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(n-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(n_{is}+j_s-j_{sa}-1)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s}^{s,D} = \sum_{k=1}^{\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s-j_{sa}^{ik}+j_s-j_{sa}-\mathbb{k})!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-s-1)!}{(D+j_{sa}+s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}-j_{sa}^s-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_s - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = j_s > 0 \wedge$$

$$j_s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{1, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{1, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_s \geq 4 \wedge j_{sa} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_{is}-j_s+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n_{sa}+j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s}^{(j_s)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{(n_{sa}-j_s+1)}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(n_{is} - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D - j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_s \leq j_{sa}^i - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j_{sa}^i - 1 + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^i = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-\mathbb{K}}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s}^{(\quad)} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - \mathbb{k})!}{(l_s - j_{sa} - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + \mathbf{n} - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + \mathbf{l}_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa} + \mathbf{l}_s = \mathbf{l}_s \wedge \mathbf{l}_{ik} + j_{sa} - j_{sa} > \mathbf{l}_i \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I - \mathbf{l}_s > 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{S}: \{j_{sa}^s, \dots, \mathbf{l}_{sa}^s, \dots, j_{sa}^i\} \quad \mathbf{S}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \mathbf{l}_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 =$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(\mathbf{l}_i+\mathbf{n}-D-s)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{ik}-k-j_{sa}^{ik}+2)-s+1} \\
& \sum_{i=\mathbb{k}}^n \sum_{j_s=\mathbf{n}+\mathbb{k}-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{ik}-k-j_{sa}^{ik}+2)-s+1}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} (n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-\mathbf{n}+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D-l_i)}{(D+j_{sa}+s-\mathbf{n}-l-j_{sa})! \cdot (n_{is}+j_{sa}-j_{sa}^{sa}-1)!} \cdot$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^{sa}, \dots, j_{sa}^{ik}\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq 4 \wedge j_{sa} \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+\mathbf{n}-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{D-n_{sa}}^{D-n_{sa}+1} \sum_{(j_s=l_{sa}-n_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}-j_s)!}$$

$$\frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(D-s)!}{(D+j^{sa}+s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s}^{(n_{is}-s-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{(n_{is}-s-\mathbb{k})}$$

$$\frac{(n_{is}+j_s-\mathbf{n}-\mathbb{k}+1)! \cdot (\mathbf{n}+j_{sa}-s-j_s)!}{(l_s-k)!} \cdot \frac{(l_s-j_{sa}-k+1)! \cdot (j_s-2)!}{(D+l_i)!}$$

$$\frac{(D+l_i)!}{(D+j^{sa}+\mathbf{n}-\mathbf{l}_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + \mathbb{k} \geq l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l_s + j_{sa} > 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \quad \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \mathbf{n} + 1 = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz \mathcal{S}_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{\mathbf{l}_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D-\mathbf{n}+1} \sum_{j_s=l_s+\mathbf{n}-k+1}^{l_s-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{j_{sa}^{ik}+1}$$

$$\sum_{j_s=j^{sa}-j_{sa}+1}^{\mathbf{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-\mathbf{n}-1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D-l_i)}{(D+j^{sa}+s-\mathbf{n}-l-j_{sa})! \cdot (n_{is}+j_s-j^{sa}-\mathbf{n})!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \mathbf{n} + j_{sa} - s = \quad \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = \quad + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_{ik}+\mathbf{n}-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{(j^{sa}=j_s+j_{sa}^{ik}+1)}^{(l_s+j_{sa}-j^{sa}+1)} \sum_{(n_i=\mathbf{n}+\mathbb{k})}^{(n_i-j_s+1)} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i+j_s-j^{sa}-\mathbb{k})} \sum_{(j^{sa}=j_s+j_{sa}^{ik}+1)}^{(j^{sa}+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{is} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{(j^{sa}=j_s+j_{sa}^{ik}-1)}^{(l_s-j_s+1)} \sum_{(n_i=\mathbf{n}+\mathbb{k})}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}^{(\quad)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-1)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}^s-s)!}.$$

$$\left((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \right.$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \bigg) \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} > 1 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^s, j_{sa}^i, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq 1 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-\mathbf{n}+1} \sum_{l_s=\mathbf{n}-D}^{j^{sa}-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is}-s-1)!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s-1) \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_i-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-l_s)!}{(D+j^{sa}+s-n+l_i-j_{sa}) \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \bigg) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{n_i=\mathbf{n}+j_s+1}^{(l_s-j_s+1)}$$

$$\sum_{n_{ik}=1}^{(l_s-k+1)} \sum_{n_{sa}=n_i+j_{sa}-j_{sa}-\mathbb{k}}^{(l_s-j_s+1)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa})! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - i)!}{(D + j^{sa} - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^i, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq 4 \wedge s = s + 1$$

$$\mathbb{K} : z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k} \\ &\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \sum_{(j^{sa}=l_s+\mathbf{n}-k+1)}^{l_s-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n-j_s+1)} \sum_{(n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k})}^{(n-j_s+1)} \\
& \frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!} \cdot \\
& \frac{(n_{sa}-j_s-1)!}{(j^{sa}-j_s-1)! \cdot (n_{sa}+j_s-j^{sa}-\mathbb{k})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+\mathbf{n}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}
\end{aligned}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \frac{(l_{sa} - \mathbf{n} - D - j_{sa})!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \sum_{j_s = l_s + \mathbf{n} - D - j_{sa} + 1}^{l_{sa} - k + 1} \sum_{j_{sa} = l_{sa} + \mathbf{n} - D}^{l_{sa} - k + 1} \frac{(n_i - j_s)!}{(n_i - n_{is} - j_s + 1)!} \sum_{n_i = \mathbf{n} + \mathbb{K}}^n \sum_{n_{is} = \mathbf{n} + \mathbb{K} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{D-\mathbf{n}+1} \sum_{j_s = l_s + \mathbf{n} - D - j_{sa} + 1}^{(l_s - k + 1)} \sum_{j_{sa} = j_s + j_{sa} - 1}^{l_{sa} - k + 1} \sum_{n_i = \mathbf{n} + \mathbb{K}}^n \sum_{n_{is} = \mathbf{n} + \mathbb{K} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{K}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - j^{sa} + 1)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s - k + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - k + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_i - j_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_{sa}-n-l_i} \sum_{j_s=l_i+n-l_{sa}+1}^{\sum_{k=1}^{D+l_{sa}-n-l_i} (l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-l_{sa}-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{i l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}} \right. \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+j_{sa}-j_{sa}+1)}^{(n_i-j_s)} \sum_{(n_{sa}=\mathbf{n}-j_{sa}+\mathbb{k})}^{(n_{is}+j_{sa}-j_{sa}-\mathbb{k})} \frac{(n_i-n_{sa}-\mathbb{k}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+\mathbb{k}+1)!} \cdot \\ \frac{(n_{is}-n_{sa}+\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_{sa}-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \\ \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \\ \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ \left. \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}-s)!} + \right. \\ \sum_{k=1}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j_{sa}=j_{sa}}^{(\quad)} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_i-j_{sa}-\mathbb{k}+1)} \\ \frac{(n_i-n_{sa}-\mathbb{k}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}-\mathbb{k}+1)!} \cdot \\ \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \\ \left. \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}-s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_s - l_{sa} - s)!}{(n + j^{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{\binom{()}{l}} \sum_{(j_s=1)}^{\mathbf{l}_{sa}-l+1} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_{sa}-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_{sa}+1)}^{(n_i-j_{sa}-\mathbb{k})} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(j^{sa} - \mathbf{l}_s - 1)!}{(j^{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - \mathbf{l}_{sa})!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{\mathbf{l}-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{\binom{()}{l}} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{\binom{()}{l}} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\binom{()}{l}} \sum_{(j_s=1)}^{\mathbf{l}} \sum_{j^{sa}=j_{sa}}^{\mathbf{l}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^i, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_{sa}}^{D_{j_{sa}}} = \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_s=\mathbf{n}-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k})}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (D - s)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (D - s)!} +$$

$$\left(\sum_{k=1}^{l-1} (l_{ik} - j_{sa}^{ik} + 2) \sum_{j_s=2}^{l_{sa}-k+1} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right)$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=1}^n \sum_{i=1}^{()} \sum_{j_s=1}^{l_{sa}-i^{l+1}} j^{sa=j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n - 1)!}{(n_{sa} + j^{sa} - n - \mathbb{k} - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j^{sa} - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{i^{l+1}} \sum_{j_s=2}^{(l_{ik}-k-j_s-2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^n \sum_{i=1}^{()} \sum_{j_s=1}^{l_{sa}-i^{l+1}} j^{sa=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{(\quad)}{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (n-s)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right)$$

$$\sum_{\binom{(\quad)}{(j_s=j_{sa}-j_{sa}+1)}} \sum_{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{(\quad)}{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+2} \right) \\
& \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_{ik}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_{ik} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_{ik}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_{ik} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_{ik})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}+1}^{i^{l-1}} \sum_{j_s=\mathbf{l}_s}^{(l_{ik}-k-1)} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{(\mathbf{l}_{sa}-i^{l+1})} \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - \mathbb{k} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{j_s=1}^{(\)} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_{sa}-i^{l+1}} \cdot \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \cdot \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_s-k-j_{sa}^{ik}+1)} \sum_{n_i=n+l_i-k-j_s+1}^n \sum_{n_{ik}=n+l_i-k-j_s+1}^n \sum_{n_{is}=n+l_i-k-j_s+1}^n \sum_{n_{ik}+j_{sa}^s-j_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k}^{(n_{is}+s-k)} \\
& \frac{(n_{is}+s-k)!}{(n_{is}+j_{sa}-n-k-j_s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_{sa}+l_i-n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$D \geq n < n_{sa} \leq D - l_i + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa}$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_s - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D - j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n_{sa} \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right. \\
& \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \left. \frac{(D+l_s+j_{sa}-n-l_{sa}-s)!}{(D+l_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \right) + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \left. \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \right)
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{i=1}^{n-l_i} \sum_{j^{sa}=\mathbf{n}-D}^{n-l_i+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_{sa} - n_{sa} - j^{sa} - \mathbb{k} + 1)!}{(j_s - 2)! \cdot (n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_{sa}}^{l_{sa}} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{(l_s+j_{sa}-k)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \quad \frac{(l_s - i_s - k + 1)!}{(l_s + i_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \quad \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \quad \sum_{k=1}^{l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{l_s+j_{sa}-k}^{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_s-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}-j_s)!}.$$

$$\frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(D+l_s)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1$$

$$D > \mathbf{n} < n, \mathbf{n} = \mathbb{k} > 0$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^k < j_{sa} - 1 \wedge j_{sa}^i \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = \mathbf{n} - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = \mathbf{n} - \mathbf{s} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right)$$

$$\sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{j_s=\mathbf{l}_s}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j_s=\mathbf{l}_s}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - l_{sa} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^n \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{()} \sum_{l_s=1}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l_s-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}+1)}^{(n_i-j_{sa}-l_k+1)}$$

$$\frac{(n_i - n_{sa} - l_k - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - n - l_s - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - j_{sa} - l_s + 1)!}{(l_s - j_{sa} - l_s + 1)! \cdot (j_s - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=1}^{D+l_{sa}-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(j_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s$$

$$\mathbf{l}_{sa} - j_{sa} + 1 > \mathbf{l}_s \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} > \mathbf{n} \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^i, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = \mathbf{n} + \mathbb{K} \wedge$$

\Rightarrow

$$fzS_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_{sa}+1} \mathbf{l}_s + j_{sa} - k$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_s=2)}^{i l_s - l_s - k + 1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=\mathbf{l}}^{(\quad)} \sum_{(j_s=1)}^{l_{sa}-\mathbf{l}+1} \sum_{j^{sa}=j_{sa}}^{l_{sa}-\mathbf{l}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa})}^{(n_i-j^{sa}-\mathbb{K}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{K} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - \mathbb{K} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(l_{sa} - j_s - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} + s - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j_s-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{j_s-1} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{K})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{K} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=\mathbf{l}}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (n-l_i)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j^{sa} = j_s + j_{sa} - 1}^{l_{sa} - k + 1} \\ & \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} - j_s + 1)}^{(n_i - j_s - 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \\ & \frac{(n_i - j_s - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j^{sa} - l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa} - i^{l+1}} \sum_{j^{sa}=j_{sa}}^{l_{sa} - i^{l+1}} \\ & \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_i - j^{sa} - \mathbb{k} + 1)} \\ & \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-j_s+1)} \sum_{n_i=n+1}^n \sum_{n_{ik}=n_i+j_{sa}-j^{ik}+1}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \frac{(n_{is} - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}}^{(n-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \frac{(n_i + j_s - s - l_k - j_{sa}^s)!}{(n_i + j_s - n - l_k - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = j_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: \mathbf{s} = j_{sa} + \mathbb{k} \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - l_{sa} - s)!} + \\
& \sum_{i=1}^n \sum_{j_s=2}^{(j_s)} \sum_{j^{sa}=j_{sa}}^{(j_s)} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \Bigg) + \\
& \left(\sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s-k+1}^{l_s-k+1} \frac{(n - j_s + 1)!}{(n - j_s - 1)!} \cdot \frac{(n_{sa} - j^{sa} - \mathbb{k})!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - 1)!} \cdot \\
& \sum_{n_i=n-\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s)}^{(n - j_s + 1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_{sa} - j^{sa} - \mathbb{k})} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(l_{sa}-i^{l+1})} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \frac{(n_i - j^{sa} - \mathbb{k} + 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=1}^{l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n_i+j_s-1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_i+j_s+1)}$$

$$\sum_{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}^{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - j^{sa} - s)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{l-1} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa}^s)!}{(n_i + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = \mathbf{n} + \mathbb{K} \wedge$$

$$\mathbb{K}_Z: \mathbf{n} \leq \mathbf{n} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - s)!} + \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(j_s=2)}^{(j_s)} \sum_{j^{sa}=j_{sa}}^{(j_s)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \Bigg) + \\
& \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_{sa}-i^{l+1})} \sum_{j^{sa}=j_s+1}^{j_{sa}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(j_s - 2)! \cdot (\mathbf{n} - n_{sa} - j^{sa} - \mathbb{k} + 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(l_{sa}-i^{l+1})} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^n \sum_{l_i=1}^{()} \sum_{j_s^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{()}^{()} \sum_{n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-l_k}^{()}$$

$$\frac{(n_i + j_s - s - l_k - j_{sa})!}{(n_i + j_s - n - l_k - j_{sa})! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa}$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} DQSD = & \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j_s=2}^{l_s+j_{sa}-k} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{j^{sa}-j_{sa}+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{sa}+j_s-j^{sa}-\mathbb{k}} \right. \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \\ & \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_s+j_{sa}-k} \right) \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=1}^{D+l_s+j_{sa}-\mathbf{n}-l_s} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_{sa} - k + 1)!}{(l_s - l_{sa} - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - l_s - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^{s})! \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-l_s)!}{(D+j_{sa}+s-n-l_s-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D+l_s-n-l_{sa}} S_{j_s, j_{sa}}^{DOs, k} \\ & \sum_{j_s=j_{sa}+n-D-j_{sa}+1}^{(l_s-s+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - \mathbb{k} + 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(j_s - k - 1)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \binom{n_{sa}=n_{ik}+j_s-j_{sa}-l_k}{(n_{is}-s-j_{sa}^{s})! \cdot (n+l_{sa}-j_s)!} \cdot \\
& \frac{(n_{is}-s-j_{sa}^{s})! \cdot (n+l_{sa}-j_s)!}{(l_s-k-1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D+l_s)!}{(D+j_{sa}^{s}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}^{s}-s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{sa} \leq D + l_{ik} + j_{sa}^{ik} - n - j_{sa}^{ik} \wedge \\
& D + j_{sa} - n - l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge
\end{aligned}$$

$$\begin{aligned}
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee
\end{aligned}$$

$$\begin{aligned}
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge
\end{aligned}$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D-j_s+1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{(j_s - 2)} \sum_{i=1}^{(j_s - k - 1)} \sum_{j^{sa} = l_i + \mathbf{n} - D}^{l_i + \mathbf{n} - l_{sa} - 1} \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_i - j_s + 1)} \\
& \frac{(j_s - 2)! \cdot (\mathbf{n} - n_{sa} - j^{sa} - \mathbb{k} + 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_{sa} - \mathbf{n} - l_{sa}} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{(j_s = j^{sa} - j_{sa} + 1)} \sum_{j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s}^{l_s + j_{sa} - k} \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(j_s - k - 1)!} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k})}^{(j_s - k - 1)!} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_{z=1}^{POSD} = & \sum_{k=1}^{l_i} \sum_{j_s=j^{sa}-j_{sa}+1}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-k+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{j_{sa}=j_{sa}} \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!} \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - 1)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} - s)!} - \\
& \sum_{k=1}^{i-l-1} \sum_{(j_s=j^{sa}-k+1)}^{(i)} \sum_{j^{sa}=j_{sa}+1}^{j^{sa}+1} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}}^{n_{ik}+j_s^{sa}-j_{sa}^{sa}+1} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j_s^{sa}-j_{sa}^{sa}+1}^{n_{ik}+j_s^{sa}-j_{sa}^{sa}+1} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{sa}-j_{sa}-\mathbb{k})}^{(i)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=\mathbf{l}}^{(i)} \sum_{(j_s=1)}^{(i)} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(i)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \\
& \frac{(n_i + j_s - s - \mathbb{k} - j_{sa}^s)!}{(n_i + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=0}^{l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{-(j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=0}^{()} \sum_{(j_s=1)}^{()} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}.$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(n_{is}-l_i+n+j_{sa}-D-s-1)} \sum_{(j_{sa}=n_{is}+j_s-1)}^{(n_{is}-l_i+n+j_{sa}-D-s-1)}$$

$$\sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}-l_i+n+j_{sa}-D-s-1)}$$

$$\sum_{n_{ik}=n_{is}+j_s^{s_{ik}}-j_{sa}^{ik}}^{(n_{is}-l_i+n+j_{sa}-D-s-1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{is}-l_i+n+j_{sa}-D-s-1)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s - j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i-n_{sa}-\mathbb{k}-1)!}{(j_s-2)! \cdot (n_i-n_{sa}-j^{sa}+1)!} \cdot \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} + \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-2)! \cdot (n_i-n_{sa}-j^{sa}-\mathbb{k}+1)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n-s)!} - \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} (n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!}.$$

$$\frac{(l_s-k-\mathbb{k})!}{(l_s-j_s-\mathbb{k}-1)! \cdot (l_s-2)!}.$$

$$\frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}.$$

$$\sum_{k=\mathbb{k}}^{\mathbb{k}} \sum_{l=j_s=1}^{\mathbb{k}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_{ik}=\mathbf{n}+\mathbb{k}} \sum_{(n_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!}.$$

$$\frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}$$

$$(D \geq \mathbf{n} < n \wedge l_i \leq D - \mathbf{n} - 1 \wedge$$

$$1 \leq j_{sa} \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - \mathbb{k} \leq j^{sa} \leq \mathbf{n} - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - \mathbf{n} - l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa})) \wedge$$

$$l_{sa} \leq l_i \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i_l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - \mathbb{k})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - j^{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n - s)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-k+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-j_{sa}^{sa})!}{(l_s-j_s-j_{sa}^{sa}-1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-l_i)}{(D+j_{sa}^s+s-\mathbf{n}-l-j_{sa})! \cdot (n_{is}-j_{sa}-j_{sa}^{sa}-1)!} \cdot
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa}^{ik} - j_{sa}^{sa} = l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa}^s - 1 \wedge j_{sa}^{ik} = j_{sa}^s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4, \mathbf{n} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - l_{sa} - s)!} \cdot$$

$$\sum_{i=1}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=1}^{()} \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1} (l_{sa} - k - j_{sa} + 2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1} (l_{sa} - k - j_{sa} + 2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{i l} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}-j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa})!}{(n_i + j_s - \mathbf{n} - \mathbb{k} - j_{sa})! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$$

$$l_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s} = \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i, \dots, j_{sa}^l\} \wedge \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k}$$

$$\mathbb{k}_Z: Z = \mathbf{s} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - l_{sa} - s)!} \cdot$$

$$\sum_{i=1}^{()} \sum_{j_s=1}^{()} j^{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{sa}=n+\mathbb{k}-j_s+1}^{n_i-j^{sa}-\mathbb{k}+1} j^{sa+1}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{\binom{()}{i}} \sum_{(j_s=1)}^{\binom{()}{i}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{i}} (n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1) n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}$$

$$\frac{(n_i + j_s - s - \mathbb{k} - j_{sa})!}{(n_i + j_s - \mathbf{n} - \mathbb{k} - j_{sa} - s)! \cdot (\mathbf{n} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k} > l_{ik} \wedge l_{sa} + j_{sa} - s = \mathbb{k} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + j_{sa} + j_{sa} - \mathbf{n} - j_{sa}^{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{is} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s} = \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^{is}, \dots, j_{sa}^i\} \wedge \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k}$$

$$\mathbb{k}_Z: Z = \mathbb{k} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l-1} \frac{(l_{ik} - k - j_{sa}^{ik} + 2)!}{(l_{ik} - k - j_{sa}^{ik} + 2)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 2)!} \cdot \sum_{n_i=\mathbf{n}+\mathbb{k}}^{l_i-1} \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{l_i} \frac{(l_i + j_{sa} - l_i^{l-s+1})!}{(j^{sa} - l_i + \mathbf{n} + j_{sa} - D - s)!} \cdot \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \frac{(n_i - j^{sa} - \mathbb{k} + 1)!}{(n_{sa} = \mathbf{n} - j^{sa} + 1)!}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{j_s} \sum_{i=1}^{(j_s - k)} \sum_{j^{sa}=\mathbf{n}+n-D}^{n-i} \frac{(n-i-j_s+1)!}{(n_{is}=\mathbf{n}+\mathbb{k}+1)! \cdot (n_{sa}=\mathbf{n}-j^{sa}+1)!} \cdot \\
& \frac{(j_s - 2)! \cdot (n_{sa} - j^{sa} - \mathbb{k} + 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(j_s)} \cdot \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j}^{D-s} &= \sum_{k=1}^{l-1} \frac{(l_i - k - D - s)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \sum_{\substack{j^{sa}=l_i+n+j_{sa}-D-s \\ j_{sa} \neq 2}}^{l_i+j_{sa}-k-s+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{n_{is}=n+\mathbb{k}-j_s+1 \\ (n_i-j_s+1)}}^{(n_i-j_s+1)} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_{is}+j_s-j^{sa}-\mathbb{k})}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_i+j_{sa}-i^{l-s+1}} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-s)!}{(D+j_{sa}+s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$((D \geq n < n) \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} l_{ik+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} l_{sa-k+1} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^l \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=j_{sa}}^{(n_i-j^{sa}-\mathbb{k})} \frac{(n_i-j^{sa}-\mathbb{k})!}{(j^{sa}-2)! \cdot (n_i-n_{sa}-j^{sa}+1)!} \cdot \\
& \frac{(n_i-1)!}{(n_i+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_{sa}-l_s-1)!}{(l_{sa}-j^{sa}-l_s+1)! \cdot (j_s-j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{sa}-j_{sa}-j^{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} - \\
& \sum_{k=1}^l \sum_{(j_s=1)}^{(l_{sa}-i^{l+1})} \sum_{j^{sa}=j_{sa}}^{(n_i-j^{sa}-\mathbb{k})}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i+j_s-s-\mathbb{k}-j_{sa}^s)!}{(n_i+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (n-s)!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} + 0 \wedge$$

$$j_s \leq j_{sa}^i - 1, j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_s \geq 4 \wedge l_i = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{j_s=2}^{l_{sa}-i^{l-1}} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^{l-1}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s - l_i)!}.$$

$$\sum_{k=\mathbb{k}}^n \sum_{i=1}^{(\cdot)} \sum_{j_s=1}^{(\cdot)} \sum_{j_{sa}=j_{sa}}^{(\cdot)} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n (n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1) n_{is} n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k} \frac{(n_{is}+j_s-\mathbb{k}-j_{sa}^s)!}{(n_{is}+j_s-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}.$$

$$\begin{aligned} & ((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1) \wedge \\ & 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee \\ & ((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1) \wedge \\ & 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik})) \wedge \\ & D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \end{aligned}$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{i=1}^{n-i} \sum_{j^{sa}=\mathbf{n}-D}^{n-i-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(j_s - 2)! \cdot (n - n_{sa} - j_s + 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & S_{i_s, j_{sa}}^{DOSL} \sum_{i=1}^{i^{l-1}(j^{sa}-j_{sa}+1)} \sum_{(j)}^{l_s+j_{sa}-k} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_s + j_{sa} - k + 1} \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j_{sa}^{sa} - \mathbb{k}}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j_{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa} = l_{ik} + \mathbf{n} + j_{sa} - D - j_{sa}^{ik}}^{l_{ik} + j_{sa} - i^l - j_{sa}^{ik} + 1} \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_i - j^{sa} - \mathbb{k} + 1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}^{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s) \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-j_{sa}+1)!}{(D+j_{sa}+s-n-\mathbb{k}-j_{sa}) \cdot (n+j_{sa}-j_{sa}^s-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - n - 1$$

$$D - n < n \wedge n - \mathbb{k} > 0$$

$$j_{sa}^{sa} < j_{sa}^i - 1 \wedge j_{sa}^{sa} < j_{sa} - 1 \wedge j_{sa}^{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_{j_{sa}^s} = j_{sa}^{sa}$$

$$\begin{aligned}
f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{is}+j_s-j_{sa}^{sa}-\mathbb{k}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l_s} \sum_{(j_s=l_{ik}-D-j_{sa}^{ik}+1)}^{(l_s-1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}^{ik}+1} \\
& \sum_{n_{is}=n+\mathbb{k}-j_s+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{(j_s=1)}^{(l_s-1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+1)}^{(l_s-k+1)} \sum_{(j_{sa}=D-j_{sa}^{ik}+1)}^{(j_{sa}-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(D + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - l_s) \leq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s}^{DO} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_s+j_{sa}-k} \\ &\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(n_i - j_s - k - 1)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-i^{l-s}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is}-s-1)!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s-1) \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_i-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-l_s)!}{(D+j_{sa}+s-n-l_s-l_{sa}) \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{j_{sa} = l_s + j_{sa} - k} \sum_{j_{sa} = l_s + j_{sa} - k}^{j_{sa} = n - D} \sum_{n_i = n + \mathbb{k} - j_s}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j_{sa} = l_s + j_{sa} - k + 1}^{l_{sa} - k + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{l_{sa}-l+1} \sum_{i=1}^{j^{sa}-l_{sa}+k} j^{sa}=l_{sa}+n$$

$$\sum_{i=1}^n \sum_{k=1}^{j^{sa}-l_{sa}+k} n_i=n+k (n_{sa}=n+j^{sa}+1)$$

$$\frac{(j^{sa} - 2)! \cdot (n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_{sa} - j^{sa} - \mathbb{k} + 1)!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \neq j_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k}_{Z, l} = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=0}^{l-1} \sum_{(j_s+\mathbf{n}-D-s+1)}^{j_s-k+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l_i^{l-s+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - \mathbb{k} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{j_s=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-D-s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$DOSD_{sa} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{j_{sa}-j_{sa}+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \right) +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right)$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}} \sum_{(j_s=l_s-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(l_{ik}-k-j_{sa}^{lk}+2)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{l_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s^{sa}}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} + j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{is} + j^{sa} - n + 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_s + 1)!}{(D + l_s - j^{sa} - s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{i=1}^{D+l_s-j_{sa}-n-l_i} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{lk}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-l_k)}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \frac{f_z S_{j_s, j_{sa}}^{DO_s} (D+l_s+j_{sa}-\mathbf{n}-l_{sa}-k-j_{sa}+1)!}{(j_s-k-j_{sa}+1)! \cdot (l_s-k-j_{sa}+1)!} \sum_{j_{sa}=l_{sa}+\mathbf{n}-D-j_{sa}^{ik}+1}^{l_{sa}+\mathbf{n}-D-j_{sa}} \sum_{j_s=j_s+l_{sa}-1}^{j_s+l_{sa}-1} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{n_{is}=\mathbf{n}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\ & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\ & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ & \left. \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} \right) + \\ & \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=\mathbf{l}_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \right. \\ & \left. \sum_{n_i=\mathbf{n}}^n \sum_{n_{is}=\mathbf{n}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \right) \end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{l_{ik}=l_{sa}+n-k-j_{sa}^{ik}+1}^{n-k-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}}^{k+1} \\
& \sum_{n_{is}=n-j_s+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (j_s - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} - 1)!}{(l_s + j_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - \mathbf{n} - s)!}{(D + j^{sa} - \mathbf{n} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=\mathbf{n}-D-s+1}^{l_s+s-\mathbf{n}-l_i} \sum_{(l_{ik}=k-j_{sa}^{ik}+2)}^{(l_{ik}=k-j_{sa}^{ik})} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}=\mathbf{n}-D-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \binom{D+l_s+j_{sa}-n-l_{sa}}{k}$$

$$\sum_{(j_s=l_s+1)}^{(j_s=l_s+1)} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right)$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{l_k=l_s+\mathbf{n}-D}^{(l_s-k+1)!} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - k)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)!} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_i - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_s-j_s-k+1) \leq j^{sa}-j_{sa}+l_{sa}-l_i} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_{sa}-n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$l_s - j_s - k + 1 \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z \mathcal{S}_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right. \\ & \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_s-k+1)} \sum_{j_{sa}=j_{sa}^{ik}-1}^{j_{sa}^{ik}} \\ & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\ & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \left. \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \right) \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik})}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{j^{sa}+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{i=1}^{(l_s-k+1)} \sum_{j=1}^{(n_{is}+j_{sa}-1)} \sum_{n_i=\mathbf{n}+1}^{(n_i-j_s+1)} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^n$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik} \mid n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{()}$$

$$\frac{(n_{ik} + j^{sa} - j_{sa}^{ik} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} - j_{sa}^{ik} - n_{is} - j_{sa} - \mathbb{k} - j_s^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge \mathbf{n} > \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSP} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-l_{sa}+1) j_{sa}=l_{sa}+n-D}^{j_{sa}-k} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D) j^{sa}=l_{sa}+n-D}^{j^{sa}-j_{sa}} \sum_{l_s+j_{sa}-k}^{l_s+j_{sa}-k} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_s-j_{sa}} \right)$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+l_{sa}-n-l_{sa}-j_s-k+1} \sum_{j_s=l_s+n-D}^{l_s-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1}
\end{aligned}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_s - j_{sa} - k - 1)!}{(n + l_{sa} - j^{sa} - l_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(n + j_{sa} - s - 1)!}{(D + j^{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=1}^{D+s-n-l_i} \sum_{(i=j_{sa}+1)}^{(l_s+j_{sa}-k)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$_{fz} S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \right.$$

$$\sum_{(j_s=\mathbf{l}_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(\mathbf{l}_s-k+1)} j^{sa} = j_s + j_{sa} - 1$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right.$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - j_{sa} + 1)!}{(D + j_{sa} - l_{sa} - s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-k}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j^{sa})}^{(n_i-j_s+1)} \\
& \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-1)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n-1)!}{(n_{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s}^{QSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_s - s - j_s)!} \cdot$$

$$\frac{(l - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - j_{sa})! \cdot (\mathbf{n} - j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 3 \wedge s = j_{sa}^i - j_{sa}^s$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+1}^n \sum_{j_s=n+1}^{(j_s+1)} \sum_{n_{ik}=n+1}^{(n_{ik}+j_s+1)} \sum_{(n_{sa}=n+1)}^{()} \sum_{j_{sa}^{ik}=j_{sa}-l_{ik}}^{(j_{sa}^{ik}-j_{sa}-l_{ik})} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s^s - s - l_{ik})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s^s - s - l_{ik})! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} + l_i)!}{(D + j^{sa} + l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge n_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{ik} = 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa} - j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i, j_{sa}^i\} \wedge$$

$$j_s \geq 3 \wedge j_s - s \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_s+n+j_{sa}-D-1}^{l_s+j_{sa}-k}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot \\
& \frac{(l_s - \mathbf{n} - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_s - 1)!}{(D + j^{sa} - \mathbf{n} - l_s - 1)! \cdot (n_{is} + j_s - n_{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}} \sum_{(j_s=j_s+1)}^{(j_s=j_s+1)} \sum_{j_s=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z \mathcal{S}_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_s-j_{sa}} \\ & \sum_{n_i=n}^n \sum_{(n_{is}=n+\mathbb{k})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n+\mathbb{k}-j_s+1)}^{j_s-j^{sa}} \\ & \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n-n_{is}-j_s+1)!} \cdot \\ & \frac{(n_{is}-2)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-j^{sa})!} \cdot \\ & \frac{(n_{sa}-j^{sa}-n+1)!}{(n_{sa}-j^{sa}-n+1)! \cdot (n-j^{sa})!} \cdot \\ & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ & \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-l_{sa}-s)! \cdot (n+j_{sa}-j^{sa}-s)!} \cdot \\ & \sum_{k=1}^{D+j_{sa}+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_s-j_{sa}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\ & \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \\ & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz_{j_s, j_{sa}}^{SD} = \sum_{k=1}^{D+l_s+1} \frac{(l_{ik}-k-j_{sa}^{lk}+2)}{(j_s+l_i+\mathbf{n}-D-s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{j^{sa}} \sum_{n_i=\mathbf{n}-j_s+1}^n \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} -$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \frac{(l_{ik}-k-j_{sa}^{lk}+2)}{(j_s+l_i+\mathbf{n}-D-s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{j^{sa}} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} j_s^{OSD} j_{sa}^{sa} &= \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s_{sa}}} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{(n_{sa}-j_s+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - j_s - s - \mathbb{k})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s - j_s)!} \\
& \frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + \mathbf{n} - \mathbf{l}_i - j_s - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s \leq j_s - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq j_s = s \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-j_{sa}+1}^{l_{ik}-k-j_{sa}+1} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_{is}=n-j_s+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=j^{sa}-j_{sa}+1}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_s - s - j_s)!}.$$

$$\frac{(l - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - j_{sa})! \cdot (\mathbf{n} - j_{sa} - j^{sa} - s)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} \geq l_{ik} \wedge l_{ik} - j_{sa} - s = \quad \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 3 \wedge s = \quad \wedge$$

$$f_{Z^S}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_i+\mathbf{n}-D-s)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+l_{sa}-k-s+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{j^{sa}} \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{is} + j_s - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+l_{sa}-k-s+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{()}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_t)!}{(D + j^{sa} + s - \mathbf{n} - l_t - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_t + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_t + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1.$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\}$$

$$s \leq 3 \wedge \mathbf{s} = \Rightarrow$$

$$_{fz} S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j^{sa}=l_{ik}+j_{sa}-j_{sa}^{ik}+2)}^{l_{sa}-k+1} \\
& \sum_{n_i=n-j_s+1}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{j^{sa}} \\
& \frac{(n_i - j_s - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1.$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 3 \wedge \mathbf{s} = \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s-1}^{a-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{j^{sa}} \\
& \frac{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} & f_Z S_{j_s, j^{sa}}^{DOSB} \sum_{k=1}^{D-j_s} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-s-1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-} \\
& \frac{(n_i - n_{is} - j_s + 1)!}{(j_s - 2)! \cdot (n_{sa} - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - j_s + 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} + j_s - n - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (j^{sa})!} \cdot \\
& \frac{(n_{sa} - j_s - k + 1)!}{(n_{sa} - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+j_{sa}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{l_{ik}, D} = \sum_{k=1}^{D-\mathbf{n}} \sum_{(j_s=l_{ik}+\mathbf{n}-D)}^{(l_{ik}+\mathbf{n}-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-j_{sa}^{ik}+1} \sum_{n_{is}=\mathbf{n}-j_s+1}^n \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{(n_i-j_s+1)} \sum_{j_{sa}^{sa}=n_{is}+j_s-j_{sa}}^{n_{is}+j_s-j_{sa}^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_s + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_s - j_{sa} - 1)!}{(n + l_{sa} - j^{sa} - l_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_{sa}-n-l_{sa}} \sum_{(i=l_s-k-D-j_{sa}^{ik}+1)}^{(i=l_s-k-D-j_{sa}^{ik}+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_s^s}^{DOS} = & \sum_{k=1}^{D-s} \sum_{(j_s=\mathbf{l}_s+n-D)}^{j_{sa}+1} \sum_{j^{sa}=\mathbf{l}_i+n+j_{sa}-D-s}^{\mathbf{l}_s+j_{sa}-k} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - 1)!} \cdot \\
& \frac{(l_{sa} - j_{sa} - k - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_s+l_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}^{ik}, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s =$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_i+\mathbf{n}-D-s)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{(j^{sa}=j_s+j_{sa}-s+1)}^{(l_i+j_{sa}-s+1)} \cdot \\
& \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_{is}+j_s-j^{sa})} \sum_{j^{sa}+1}^{j^{sa}} \cdot \\
& \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}} \cdot \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - s - k)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - s - j_s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned} f_{ZS}^{D0} S_{j_s, j_{sa}}^{D0} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \\ &\quad \sum_{n_i=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{(n_{is}+j_s-j_{sa})} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}+j_{sa}-j_{sa})} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\quad \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ &\quad \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\ &\quad \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} - 1)!}{(l_s + l_{sa} - j^{sa} - l_s)! \cdot (l_s - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+s-\mathbf{n}-l_i} \sum_{(i_s=i_{sa}-j_{sa}+1)}^{(i_s=i_{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \bigg) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^{s-1} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(j_s + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \\
& \frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{sa} \wedge$$

$$D \geq n < n \wedge I = 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s \leq j_s - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq j_{sa} = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right)$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - s)!} + \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(j_s=2)}^{(j_s)} \sum_{j^{sa}=j_{sa}}^{(j_s)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j^{sa}+1)} \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \right) + \\
& \left(\sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+j_{sa}-j_{sa}^{ik}+2)}^{l_{sa}-l+1} \sum_{(n_{is}=n-j_s+1)}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j_s+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=1)}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{i!-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\cdot)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+j_{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{\sum} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\cdot)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j^{sa} - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=1}^{\sum} \sum_{(j_s=1)}^{(\cdot)} \sum_{j_{sa}=j_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{j_{sa}^{lk}+j_{sa}-1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=n_{is}+1)}^{(n_i-j_{sa}+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}}^{n_{is}-j_{sa}} \frac{(n_i-n_{sa}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+1)!} \cdot \frac{(n_{is}-j_{sa}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}-j_s-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}-s)!} + \sum_{k=1}^{()} \sum_{l}^{()} \sum_{j_{sa}=j_{sa}}^{()} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_i-j_{sa}+1)} \frac{(n_i-n_{sa}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+1)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}-s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_s}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=j_{sa}+1} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{is}=n+\mathbb{k}-j_s)} \sum_{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)!(n+j_{sa}^s-j_s-j_s)!} \cdot \\
& \frac{(l_s-j_s-1)!}{(l_s-j_s-k+1)!(j_s-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \cdot \\
& \sum_{k=1}^{(n)} \sum_{(j_s=1)}^{(n)} \sum_{j^{sa}=j_{sa}}^{(n)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)!(n-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+s-n-l_i)!(n-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_i < D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} \wedge$$

$$j_s + j_{sa} \leq n \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l_i = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{(j_s=j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \right) + \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-j_{sa}^{ik}+2}^{l_{sa}-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - s)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l_{sa}-l_s+1} \sum_{j_s=1}^{j^{sa}-l_s+1} j^{sa}=l_{sa}+n_{sa}+j_s-1 \\
& \sum_{n_i=n}^n \sum_{n_{sa}=n}^{n_{sa}=n} (n_i - j^{sa} + 1) \\
& \frac{(n_i - j^{sa} - 1)!}{(j^{sa} - n_{sa} - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{Z^s} S_{j_{sa}}^{l_s, sD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

$$\sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-l}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i+j_s-j^{sa})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{ik}+l_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{is}-j_s}^{(n_{ik}-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{sa}-\mathbb{k})}^{(n_{sa}-j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s - j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s \leq s \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

$$\sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_s)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D}^{l-1} \sum_{j_{sa}=n-j^{sa}-1}^{(l_s-1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{(l_s-1) \quad l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\sum_{k=0}^{\infty} \sum_{l=0}^{\infty} \sum_{j_s=1}^{l_s} j_s^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j_{sa})}^{(n_i-j_{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{sa} - 2)! \cdot (n_i - n_{sa} - j_{sa} + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n_i - j_{sa})!} \cdot$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} - l_s + 1)! \cdot (j_{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j_{sa} - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot$$

$$\sum_{j_s=j_{sa}+1}^{D+l_s+s-n-l_i} \sum_{j_s=j_{sa}+1}^{l_s+j_{sa}-k} \sum_{j_s=j_{sa}+1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \binom{D+l_s+j_{sa}-n-l_{sa}}{k} \sum_{k=1}^{(l_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{n-D-j_{sa}^{ik}+j_{sa}} \sum_{n_i=n}^{(n_i-j_s)} \sum_{n_{is}=n-j_s+1}^{n_{is}-j_s} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} \right) + \\ & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \right. \\ & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right) \end{aligned}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-n-l_{sa}}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=1)}^{l_{ik}+j_s} \sum_{j_s+l_i+\mathbf{n}-D-s+1}^{l_{ik}+j_s} \sum_{j_s+l_i+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_s} \cdot \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-k+1)} \cdot \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - s - k)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{j_s=j_{sa}+1}^{j_{sa}-j_{sa}+1} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}-j_{sa}+1} \\ & \sum_{n_i=n-j_s+1}^n \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} + \\ & \sum_{k=1}^{i^{l-1}} \sum_{j_s=2}^{l_s-k+1} \sum_{j_{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=0}^{l-1} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_s}^{l_s - i} \sum_{n_i=n}^n \sum_{n_{sa}=n_{sa}-j_s+1}^{(n_i - j^{sa} + 1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - n_{sa} - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{i-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^n \sum_{l=1}^{(j_s=1)} \sum_{j^{sa}=j_s}^{(j_s=1)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - s - l)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - l - s)! \cdot (n - s)!} \cdot \\
& \frac{(D - n - l_i)!}{(n - s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee \\
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee \\
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee
\end{aligned}$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_t \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz_{DOSD}^{j_{sa}} = \sum_{k=1}^{i^t} \sum_{i_s=2}^{i^t-k+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{i^t-k+1} \sum_{n_i=\mathbf{n}}^{(n_i-j_s)} \sum_{j_s=\mathbf{n}-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \sum_{k=i^t}^{()} \sum_{j_s=1}^{l_{sa}-i^t+1} \sum_{j_{sa}=j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!} \\
& \frac{(l_{sa} - l_s - j_{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=1}^{l_s-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_{sa}=1}^{j_s-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=\mathbf{l}}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n)$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n)) \wedge$$

$$(D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=1}^{l_s - (l_s - k + 1)} \sum_{j_s=1}^{l_s - k + 1} \sum_{j^{sa}=l_s + j_{sa} - k + 1}^{l_s - k + 1} \\
& \sum_{n_{is}=n - j_s + 1}^n \sum_{n_{sa}=n - j^{sa} + 1}^{n_{is} + j_s - j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{i=1}^{l_s - k} \sum_{j_s=1}^{l_s - k} \sum_{j^{sa}=j_{sa} + 1}^{l_s - k + 1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \\
& \frac{(l_{sa} - l_s - j_{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (n - j_{sa})!} \\
& \frac{(D + j_{sa} - l_i - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s - 1)!} - \\
& \sum_{k=1}^{()} \sum_{j_{sa}=j^{sa}-j_{sa}+1}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n)$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n)) \wedge$$

$$(D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k + 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{i^{l+1}} \sum_{(j_s=1)}^{i^{l+1}} \sum_{j^{sa}=j_s+1}^{i^{l+1}} \cdot \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{i^{l-1}} \cdot \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-s-k)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_s-s)!} \cdot \\
& \sum_{k=0}^{\infty} \sum_{(l_s=1)}^{(\cdot)} \sum_{j_{sa}^a=j_{sa}}^{\infty} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=n_i+j_{sa}^{sa}-j_{sa}^{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{\infty} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq \mathbf{n} < n \wedge l_i \leq D - \mathbf{n} + 1 \wedge \\
& 1 \leq j_s \leq j_s^{sa} - j_{sa} \wedge \\
& j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee \\
& (D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge \\
& 1 \leq j_s \leq j_s^{sa} - j_{sa} \wedge \\
& j_s \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1) \vee \\
& (D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge
\end{aligned}$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right.$$

$$\sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-l_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i+j_s-j^{sa})}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\begin{aligned}
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{ik}+j_{sa}-\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s_{sa}}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \\
& \frac{(l_s - k - j_s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} \wedge \\
& j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_{ik} - j_s - n - j_{sa}^{ik}) \vee
\end{aligned}$$

$$\begin{aligned}
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} \wedge \\
& j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee
\end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz^{OSD}_{j_{sa}} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{j_s-k+1} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^{s}-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1) \cdot (j_s-2)!} \cdot \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge
\end{aligned}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-n}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)!(n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}-j_s-j_{sa}+1)!}{(j_s+l_{sa}-j_s-l_s)!(j^{sa}-j_s-j_{sa}+1)!} \cdot \\
 & \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{j_s=1}^{(n-l_s+1)} \sum_{j^{sa}=l_s+n-j_s+1}^{n-l_s+1} \\
& \sum_{n_i=n+l_s-j_s+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n-l_s+1)} \\
& \frac{(n_i - j_{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_s - n - l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(n-l_s+1)} \sum_{j^{sa}=l_s+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n-l_s+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} \epsilon_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{l-1} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}}^{n_i-j_s+1} \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=1}^{l-1} \sum_{j_s=1}^{l-1} \sum_{j^{sa}=j_{sa}}^{l-1} \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - 1)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} - s)!} \cdot \\
& \sum_{k=1}^{l-1} \sum_{(j_s=j^{sa}-\mathbf{l}_{sa}+1)}^{(j_s=j^{sa}-\mathbf{l}_{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{(j^{sa}=j_{sa}+1)} \\
& \sum_{(n_{ik}=\mathbf{n}_{is}+j^{sa}-j_{sa}-\mathbf{l}_k)}^{(n_{ik}=\mathbf{n}_{is}+j^{sa}-j_{sa}-\mathbf{l}_k)} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbf{l}_k)}^{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbf{l}_k)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbf{l}_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbf{l}_k - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l-1} \sum_{(j_s=1)}^{(j_s=1)} \sum_{j^{sa}=j_{sa}}^{(j^{sa}=j_{sa})} \\
& \sum_{n_i=\mathbf{n}+\mathbf{l}_k}^n \sum_{(n_{ik}=\mathbf{n}_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n_{ik}=\mathbf{n}_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbf{l}_k} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbf{l}_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbf{l}_k - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$fz S_{j_s}^{CD} = \sum_{k=1}^{l_s-1} \sum_{(j_s=j_s^a-j_{sa}+1)}^{l_{sa}-k+1} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}}^{n_i-j_s} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=1)}^{()} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+l_s-k+1}^{l_{sa}-k+1} \sum_{j_s=1}^{n-l_i-l_s-k+1} \sum_{n_i=n-l_i-l_s-k+1}^{n-l_i-l_s-k+1} \sum_{n_{is}=n+l_k-j_s+1}^{n-l_i-l_s-k+1} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}-l_k}^{n-l_i-l_s-k+1} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^{n-l_i-l_s-k+1}$$

$$\frac{(n_{ik} + j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - l_k + j_{sa} - l_k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_{sa} + l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(n \geq n < n+1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq i_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$i_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq (D + j_{sa} - n) \wedge$$

$$D \geq n < n+1 \wedge l = l_k = 0 \wedge$$

$$j_{sa}^s = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i_l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - i_s - k + 1)!}{(l_s - i_s - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i_l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} - \\
& \sum_{k=1}^{i_l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-l_s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_s-s)!} \cdot \\
& \sum_{k=0}^{l_s} \sum_{(j_s=1)}^{(\cdot)} \sum_{j_{sa}=j_{sa}}^{(\cdot)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}^{lk}-j_{sa}-j_{sa}^{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_s^k + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + j_{sa} + s - n - j_{sa})) \wedge$$

$$D > n \wedge n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$j_{sa} \in \{j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{(\cdot)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - n_{sa} - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_s - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - 1)! \cdot (n_{is} + j_s - n_{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}^{()} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} = l_s \wedge$$

$$l_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} j_s, j^{sa} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{\binom{(\quad)}{l}} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_s=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - j^{sa} + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j_{sa} + \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_{sa}-k-1} \sum_{(j_s=2)}^{(l_{sa}-k-1)+2} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{\binom{(\quad)}{l}} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\binom{(\quad)}{l}} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_{\mathbf{n}, j_{sa}}^{SD} = \sum_{k=1}^{i^l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{\binom{(\quad)}{\mathbf{l}_i}} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_s=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - j^{sa} + 1)!} \cdot \\
& \frac{(n_i - \mathbf{n} - 1)!}{(n_i + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j_{sa} + \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{(\mathbf{l}_i - k - \mathbf{l}_s + 2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{\binom{(\quad)}{\mathbf{l}_i}} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\binom{(\quad)}{\mathbf{l}_i}} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ (n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1)}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$S_{i,j_{sa}}^{DC} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j_s-j^{sa})}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{sa} + j_s - j^{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(j^{sa} - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(l_i+j_{sa}-i^{l-s+1})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(l_i+j_{sa}-i^{l-s+1})}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{is}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - s - j_s)!} \\
& \frac{(l_s - k - j_s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{is} - n - l_i - j_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + j_s \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s < n + j_{sa} - s \wedge$$

$$l_s - j_{sa}^{ik} + j_s \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^s, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = 1 \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{is}+j_s-j^{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l_{ik}-k-1+2} \sum_{i=2}^{l_{ik}-k-1+2} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{n_{is}+j_s-j^{sa}} \\
& \sum_{n_{is}=\mathbf{n}-j_s+1}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_{sa}-l+1} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-l+1}
\end{aligned}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} + 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_i} \sum_{(j_s=j^{sa}-l_i+1)}^{(j_s=j^{sa}-l_i)} \sum_{(j_{sa}=j^{sa}-k-j_{sa}^{ik}+1)}^{(j_{sa}=j^{sa}-k-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D > n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s+1}^{l_i+j_{sa}-k-s+1} \\ & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} + \\ & \sum_{k=1}^{l-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\ & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{j_s=1}^{(l_s - k - 1)} \frac{(l_i + j_{sa} - l_s - s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \sum_{n_i=n+1}^n \sum_{n_{sa}=n-j_{sa}+1}^{(n_i - j_{sa} + 1)} \frac{(n_i - j_{sa} - 2)!}{(n_i - n_{sa} - j_{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j_s + j_{sa} - n - l_{sa}} \sum_{j_s=l_i+n-D-s+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(j_s+l_i+n-D-s+1)} \sum_{n_i=n+1}^n \sum_{n_{is}=n+1}^{(n_i-j_s+1)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - 1)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - 1 - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\ & \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j_s-j^{sa})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(j^{sa} - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^l \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{il-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s_{sa}}-j_{sa}-j_{sa}^{ik}+1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - j_{sa}^{ik} - j_{sa} - s - \mathbb{k})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - j_s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{n})!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n) \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$\mathbf{l}_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_{zS}^{D\mathbf{C}}_{j_s, j} = & \sum_{i=1}^{\mathbf{l}} \sum_{\substack{(l_{ik} - j_{sa}^{ik+2}) \\ (j_s - 2)}}^{(l_{ik} - j_{sa}^{ik+2})} \sum_{j^{sa}=j_s+j_{sa}-1}^{-k+1} \\ & \sum_{n_i=\mathbf{n}}^{(n_i-j_s)} \sum_{n_s=\mathbf{n}-j_s+1}^{(n_i-j_s)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=\mathbf{l}}^{\binom{\cdot}{\mathbf{l}}} \sum_{(j_s=1)}^{\mathbf{l}_{sa}-\mathbf{l}+1} \sum_{j^{sa}=j_{sa}} \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!} \\
& \frac{(l_{sa} - l_s - j_{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=1}^{\Delta} \sum_{(i_s=2)}^{\Delta} \sum_{j_s=1}^{(l_s-k-j_{sa}^{ik}+1)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=\mathbf{l}}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s =$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=l_{sa}+n-D-j_s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}-1}^{l_{sa}-k+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{j^{sa}} \\
& \frac{(n_i - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-j_s+1)} \sum_{n_i=n+1}^{(n-j_s+1)} \sum_{(n_{sa}=n-j_{sa}-l_k)}^{(j_{sa}^{ik}-j_{sa}-l_k)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)! \cdot (n + j_{sa} - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_{sa})!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - j_{sa} < l_{ik} \leq D \wedge l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i \leq j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\{j_s^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_s=2)}^{l_s-j_s-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^n \sum_{(j_s=1)}^{(n_i-j_s+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l_{ik}-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{sa}=n-j_{sa})}^{(n_i-j_{sa}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n_i - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_{ik}+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-j_{sa}^{ik}-1)}^{(n_i-j_s+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_i-j_s+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}+\mathbf{n}-D-j_{sa}^{ik})} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} + \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{(n_{is} - n_{sa} - 1)} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(n_{is} - n_{sa} - 1 - j_s - k + 1)} \frac{(n_{is} - n_{sa} - 1 - j_s - k)!}{(j_s - k)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i - j^{sa} + 1)}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - k)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(n_{is} - n_{sa} - 1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1))$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D > \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(D + l_{sa} - j^{sa} - l_s)! \cdot (D + j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=l_s-k+1}^{l_s} \sum_{(j_s=2)}^{l_s-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\sum_{k=1}^{\mathbf{l}} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_i+j_{sa}-\mathbf{l}^{s-1}+1}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa})}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - j^{sa} + 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\mathbf{l}_{sa} - j_{sa} - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j_{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j^{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \sum_{(j_s=j^{sa}-\mathbf{n}+1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik} \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$_{fz} S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j_{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_s+j_{sa}-k} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i+j_s-j^{sa})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i^{l+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \\
& \frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge
\end{aligned}$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s = \mathbf{l}_i + \mathbf{n} - D - s + 1)}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{j^{sa} = \mathbf{l}_i + \mathbf{n} + j_{sa} - s}^{\mathbf{l}_i + j_{sa} - s + 1} \\ & \sum_{n_i = \mathbf{n}}^{(n_i - j_s + 1)} \sum_{n_{is} = \mathbf{n} - j_s + 1}^{(n_{is} + j_s - j^{sa})} \sum_{j^{sa} + 1}^{j^{sa} + 1} \\ & \frac{(j_s - 2)! \cdot (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_i - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=1}^{i^{l-1}} \sum_{(j_s = \mathbf{l}_i + \mathbf{n} - D - s + 1)}^{(\mathbf{l}_s - k + 1)} \sum_{j^{sa} = j_s + j_{sa} - 1}^{\mathbf{l}_i + j_{sa} - k - s + 1} \\ & \sum_{n_i = \mathbf{n}}^n \sum_{(n_{is} = \mathbf{n} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \end{aligned}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D-s+1)}^{(j_s=l_s+n-D-s+1)} \sum_{(j_{sa}=j_s+j_{sa}-1)}^{(j_{sa}=j_s+j_{sa}-1)}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(n_i - j_s - n_{sa} - j^{sa} + 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_t)!}{(D + j^{sa} + s - \mathbf{n} - l_t - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right.$$

$$\sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_i+n-D-j_{sa}^{ik}+1}^{l_{ik}-k-j_{sa}^{ik}+1} j^{sa} - n - D \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}-j_s+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_t)!}{(D + j^{sa} + s - \mathbf{n} - l_t - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right.$$

$$\sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-l_{sa}-k+1}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-j_s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}-1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-j_s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_t)!}{(D + j^{sa} + s - \mathbf{n} - l_t - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right)$$

$$\sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_s^{ik}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-j_s^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}+1)} \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_t)!}{(D + j^{sa} + s - \mathbf{n} - l_t - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right.$$

$$\sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-s+1}^{(j_{sa}-k+1)} \\
& \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}+j_s-j^{sa}-l_k)} \sum_{j^{sa}=1}^{j^{sa}+1} \\
& \frac{(n_{l_i} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{l_i} - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{j_s} - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l_s - \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l + 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k} - j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_s+j_{sa}-k} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{D+l_s+j_s=n-l_{sa}}^{D-n+1} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^{ik}+j_s-j_s)!} \cdot \\
& \frac{(l_s-\mathbb{k}-1)!}{(l_s-\mathbb{k}+1) \cdot (j_s-2)!} \\
& \frac{(D-n)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right. \\
 & \sum_{(j_s=l_{sa}+n-D-j_{sa})}^{(l_s-k+1)} \sum_{j_{sa}=j_{sa}^{s-1}}^{(l_{sa}+n-D-j_{sa})} \\
 & \sum_{n_i=n+\mathbb{k}-j_s+1}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \left. \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \right)
 \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=l_{sa}+n-l_{sa}-j_{sa}+1}^{l_s-k} \sum_{j^{sa}=j_s}^{l_s-k+1} \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}+j_s-j^{sa}-l_k} j^{sa+1} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (n_{is} + j_{sa} - j^{sa} - 1)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{i=0}^{(l_s-k+1)} \sum_{j=0}^{(n_{is}+j_{sa}-1)} \sum_{n_i=\mathbf{n}+1}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_{is}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{ik}+j_{sa}^{ik}-n_{is}-j_{sa}-1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_{sa}-j_{sa}-1)}$$

$$\frac{(n_{ik} + j_{sa}^{ik} - n_{is} - j_{sa} - 1)! \cdot (j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - n_{is} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_i = D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_s^i - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_s-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_s-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_s-l_{sa}-s)!}{(D+j^{sa}-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \sum_{l_i=1}^{D+l_s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{\mathbf{s}, j^{sa}}^{OSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_s+\mathbf{n}+j_{sa}-D-1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D}^{l_s+j_{sa}-k} \\
 & \sum_{n_i=n}^n \sum_{n_i=n}^{(n+j_s+1)} \sum_{n_i=n}^{(n+j_s+1)} \\
 & \sum_{n_{ik}=n}^{(n+j_s+1)} \sum_{n_{sa}=n}^{(n+j_s+1)} \sum_{n_{sa}=n}^{(n+j_s+1)} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} - s - l_{sa})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa}^{ik} - l_{sa} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge n_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$\geq n < n \wedge l = l_{sa} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{sa}, \dots, j_{sa}^i\} \wedge$$

$$> 3 \wedge s + l_{sa} \wedge$$

$$l_{sa}: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(l_s - \mathbb{k} - 1)!}{(l_s - j_s - \mathbb{k} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(n_{is} - l_{sa} - 1)!}{(n_{is} + j^{sa} - \mathbf{n} - 1)! \cdot (n_{is} - l_{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_s=\mathbf{n}-D-s+2)}^{(l_{sa}-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}=j_s+j_{sa}-1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{(n_{sa}=\mathbf{n}-j_s-1)}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\ & \frac{(n_i-j_s-1)!}{(j_s-2)! \cdot (n_{ik}+j_s-1)!} \cdot \\ & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-1)!}{(n_{sa}+j_s-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\ & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ & \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} - \\ & \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}=j_s+j_{sa}-1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\ & \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \\ & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{n+1} \sum_{l_s=l_s+n-D}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-k+1)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{s-1})}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_s - s - j_s)!}.$$

$$\frac{(l - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l - j_{sa})! \cdot (\mathbf{n} - j_{sa} - j^{sa} - s)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i \geq l_{ik} \wedge l_{ik} - j_{sa} - s = \quad \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s - \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+1)} \cdot$$

$$\sum_{(n_i=n+l_k)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i+j_s-j^{sa}-l_k)} \sum_{(j^{sa}=j_s+1)}^{(j^{sa}-j_s+1)} \cdot$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s}^{DOS} = \sum_{k=1}^{\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_i+\mathbf{n}-D-s)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+l_{sa}-k-s+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{(n-j_s+1-j^{sa}-\mathbb{k})} \\
& \frac{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - 1)! \cdot (n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+l_{sa}-k-s+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = \mathbf{n} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \mathbf{s} = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+j_{sa}-k-j_{sa}^{ik})}^{(l_{sa}-k+1)}$$

$$\sum_{(n_i=n+l_k)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i+j_s-j^{sa}-l_k)} \sum_{(j^{sa}=1)}^{(j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \big) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = l_s = 0 \wedge$$

$$j_s \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{n - \mathbb{k}, j_{sa}, \dots, j_{sa}^{lk}\} \wedge$$

$$j_s \geq 3 \wedge j_s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\begin{aligned}
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-j_{sa}-1)}^{(l_{ik}-k-j_{sa}^{ik}+1)} \sum_{(j_s=j_s+j_{sa}-1)}^{l_{sa}-k+1} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{\mathbf{s}, j^{sa}}^{OSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+l_{sa}-k+1}^{l_{ik}+j_s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n-j_s+1)}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + 1)! \cdot (n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOSD} = \sum_{i=1}^{l_s+1} \sum_{j_s=l_s+n-D}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} + j_s - n - 1)!}{(j_s - 1)! \cdot (n_{sa} + j_s - n - 1)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}^{s-1}, \dots, j_{sa}^i\}$$

$$s \geq 3 \wedge \mathbf{s} = s + 1 \wedge$$

$$\mathbb{K}_{\mathbb{Z}}: \mathbb{Z} \rightarrow \mathbb{Z} \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \\ & \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+1}^{l_s-k+1} \sum_{j^{sa}=l_s+j_{sa}-s+1}^{l_s+j_{sa}-s+1} \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}+j_s-j^{sa}-l_k} j^{sa+1} \\
& \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=j^{sa}-j_{sa}+1}^{()} \sum_{j^{sa}=l_s+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbf{n} - \mathbb{k} > \mathbf{n} \wedge$$

$$j_{sa}^s \leq j_{sa}^{lk} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_i+\mathbf{n}-D-s)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=1}^{D-\mathbf{n}+1} \sum_{(i-j_s-\mathbf{n}-D-s+1)}^{-(k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}-j_s-s-\mathbb{k})! \cdot (n+j_{sa}-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$D \geq n < n \wedge I = \mathbb{K} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$f_z S_{sa}^D = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k} \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - 1)!} \cdot \\
& \frac{(n_{sa} - n_{sa} - k - 1)!}{(n_{sa} - n_{sa} - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - n_{sa} - j_{sa} + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_{sa}-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=j_s+l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i-j_s+1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\ & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-1)!}{(n_{sa}+j_s-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\ & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ & \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j_s+l_{sa}-j^{sa}-l_s)! \cdot (j^{sa}-j_s-j_{sa}+1)!} \cdot \\ & \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} + \\ & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\ & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-l_{sa}-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-l_{sa}-j_s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-l_k}^{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-l_k)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - l_k - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - l_k - j_s - s - l_k)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$D \geq 1 \wedge n \wedge l_{sa} \leq D - j_{sa} - n \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j_s - n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$n \wedge I = \mathbb{K} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{K} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - j_s - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - k - 1)!}{(l_{ik} - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \Bigg) +$$

$$\left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right.$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=0}^{l-1} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa})}^{(n_i-j^{sa}-\mathbb{K}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - j^{sa} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j^{sa} - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_s^s)}^{()} \sum_{j^{sa}=j_{sa}+1}^{n_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{K})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{K} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ (n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1)}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}$$

$$D \geq \mathbf{n} < n \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{sa}^D = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_s=\mathbf{n}-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k})}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - j_s + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} - j^{sa} - s)!} +$$

$$\left(\sum_{k=1}^{l-1} \sum_{j_s=2}^{(l_{ik}-j_s+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right)$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=1}^{\infty} \sum_{i=1}^{\infty} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} j^{sa=j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{K}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - \mathbb{K} - 1)! \cdot (n_i - j^{sa})!} \cdot \\
& \frac{(l_{sa} - n_i - j_{sa} + 1)!}{(l_{sa} - n_{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{\infty} \sum_{(j_s=2)}^{(l_{ik}-k-j_s-2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{(\cdot)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{K})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{K} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\infty} \sum_{i=1}^{\infty} \sum_{(j_s=1)}^{(\cdot)} j^{sa=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{(\quad)}{n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right.$$

$$\sum_{(j_s=j^{sa}-j_{sa}+1)}^{\binom{(\quad)}{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+j_s-k-j_{sa}^{ik}+1}^{l_{ik}+j_s-k-j_{sa}^{ik}+2} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_s-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{l-1} \sum_{j_s=l_s}^{(l_{ik}-k-1)} \sum_{j^{sa}=l_{sa}+n}^{l_{sa}-i+1} \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i}^l \sum_{j_s=1}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i+1} \frac{(n_i - j^{sa} - k + 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n+j_{sa}-D-s)}^{(n)} \sum_{(n_i=n+l_i-j_s+1)}^{(n)} \sum_{(n_{ik}=n+l_i-j_s+1)}^{(n)} \sum_{(n_{sa}=n+l_i-j_s+1)}^{(n)} \\
& \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n + 1 \wedge l_i \leq D - l_i + 1 \wedge$$

$$1 \leq i \leq j^{sa} - j_{sa}$$

$$l_i + j_{sa} - j^{sa} \leq n + j_s - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} + j_{sa} - j_{sa} > l_{ik} \wedge$$

$$D - j_{sa} - l_i < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n + 1, I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right.$$

$$\sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{j^{sa}=j_s+j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i-1)}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D+l_s+j_{sa}-n-l_{sa}-s)!}{(D+l_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \Big) +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{i=l_i}^{n-l_i+1} \sum_{j^{sa}=\mathbf{n}-D}^{n-l_i+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_s - 1)!}{(j_s - j_{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_j^{l_{sa}} S_{sa}^D &= \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s=j^{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\ &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\quad \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - i_s - k + 1)!}{(l_s - i_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + n_{sa} - n - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-l_k+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-j_s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^{s}-j_s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-j_s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - j_{sa} - 1$$

$$D > n < n \wedge \mathbb{k} = \mathbb{k} \geq 0$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1$$

$$\{j_{sa}^s, \mathbb{k}, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{2 \leq \mathbb{k}} = 1$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

$$\sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{j_s=\mathbf{n}-j^{sa}+1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j_s=\mathbf{n}-j^{sa}+1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - l_{sa} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=2}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_{ik}+j_{sa}-i} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-i-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_{sa}-k)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j^{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j_s - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=1}^{D+l_{sa}-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{j_s-k+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_s-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s$$

$$\mathbf{l}_{sa} - j_{sa} + 1 > \mathbf{l}_s \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^1, \dots, j_{sa}^s\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = 1 + \mathbb{K} \wedge$$

\Rightarrow

$$fzS_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_{sa}+1} \mathbf{l}_s + j_{sa} - k$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=0}^{l_s-k+1} \sum_{(j_s=2)}^{l_s-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^n \sum_{i=1}^{l_s} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{K}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - \mathbb{K} - 1)! \cdot (n_i - j^{sa})!} \cdot \\
& \frac{(l_{sa} - i^{l+1} - j_{sa} + 1)!}{(l_{sa} - i^{l+1} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} + s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_s-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{l_s-1} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{(n_i-j_s+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{K})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{K} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^n \sum_{i=1}^{l_s} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}}
\end{aligned}$$

$$\sum_{n_i=\mathbb{n}+\mathbb{k}}^n \sum_{\substack{(\quad) \\ n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j^{sa} = j_s + j_{sa} - 1}^{l_{sa} - k + 1} \\ & \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} - j_s + 1)}^{(n_i - j_s - 1)} \sum_{(n_{sa} = \mathbf{n} - j_s - 1)}^{(n_{is} + j_s - j^{sa} - \mathbb{k})} \\ & \frac{(n_i - j_s - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j^{sa} - l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\ & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{l_{sa} - i^{l+1}} \sum_{j^{sa}=j_{sa}}^{l_{sa} - i^{l+1}} \\ & \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_i - j^{sa} - \mathbb{k} + 1)} \\ & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n+j_s+1)} \sum_{n_i=n+1}^{(n+j_s+1)} \sum_{n_{ik}=n_i+j_{sa}-j_{sa}^{ik}}^{(n_{sa}=n_i+j_{sa}^{ik}-j_{sa}-l_k)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s - s - l_k)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} + s - n - l_i - j_{sa})!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(n)} \sum_{j^{sa}=j_{sa}}^{(n)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^{i_1}, j_{sa}^{i_2}, \dots, j_{sa}^{i_s}\},$$

$$s \geq 3 \wedge \mathbf{s} = \mathbf{n} + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: \mathbf{n} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{i_l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - s)!} + \\
& \sum_{i=n+l_k}^n \sum_{j_s=2}^{(j_s)} \sum_{j^{sa}=j_{sa}}^{(j_s)} \frac{(n_i - j^{sa} - l_k + 1)!}{(n_{sa} - n - j^{sa} + 1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \Bigg) + \\
& \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-k} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s-k+1}^{l_s-k+1} \frac{(j_s - j_s + 1)!}{(j_s - j_s + 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k})} \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(l_s-i^{l+1})} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \frac{(n_i - j^{sa} - \mathbb{k} + 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\cdot)} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l}^n \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)} \\
& \sum_{n_{ik}=n+l}^{n_{ik}=n+l} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}^{(\cdot)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa} - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=1}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)} \sum_{j^{sa}=j_{sa}}^{(\cdot)} \\
& \sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^{(\cdot)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{ik} \leq D + j_{sa}^{ik} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{sa} - j_{sa} + 1 > \mathbf{l}_s \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^{i_1}, j_{sa}^{i_2}, \dots, j_{sa}^{i_s}\},$$

$$s \geq 3 \wedge \mathbf{s} = \mathbf{n} + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: \mathbf{n} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - s)!} + \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(j_s=2)}^{(j_s)} \sum_{j^{sa}=j_s}^{(j_s)} \frac{(n_i - j_s - \mathbb{k} + 1)!}{(n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \Bigg) + \\
& \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right) \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_{sa}-i^{l+1})} \sum_{j^{sa}=j_s+1}^{j_{sa}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_s - 1)!}{(n_i - j_{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}} \cdot \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(l_s-k+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^n \sum_{l_i=1}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{()}^{()} \sum_{n_{sa}=n_{ik}-j_{sa}-l_k}^{n_{ik}-j_{sa}-l_k}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - l_i - s - 1)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik} - l_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - l_i - l_i)! \cdot (n - s)!}.$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{sa} - j_{sa} + 1 > \mathbf{l}_s \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \text{DQSD} = & \left(\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \sum_{j_s=2}^{\mathbf{l}_s+j_{sa}-k} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_s+j_{sa}-k} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{j_s-1} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \right. \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \\ & \left(\sum_{k=1}^{D+\mathbf{l}_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_s+j_{sa}-k} \right) \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=1}^{D+l_s+j_{sa}-\mathbf{n}-l_s} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_{sa} - k + 1)!}{(l_s - l_{sa} - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - l_s - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik} (n_{sa}=n_{ik}+j_{sa}-j_s-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^{s}-j_s-j_s)!} \cdot \\
& \frac{(l_s-\mathbb{k}-1)!}{(l_s-\mathbb{k}+1) \cdot (j_s-2)!} \\
& \frac{(D-n)!}{(D+j^{sa}+s-n-j_{sa})! (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} \wedge \\
& j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \vee \\
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} \wedge \\
& j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee \\
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} \wedge \\
& j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee
\end{aligned}$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D+l_s-n-l_{sa}} S_{j_s, j_{sa}}^{DOS} \sum_{i_s=\mathbf{n}+l_{sa}+n-D-j_{sa}+1}^{(l_s-k+1)} \sum_{i_s=\mathbf{n}+l_{sa}+n-D-j_{sa}+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \right)
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-\mathbf{l}_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{s}-j_{sa}-\mathbb{k})} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^{s}-j_s-s-\mathbb{k})!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge
\end{aligned}$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D-j_s-k+1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=\mathbf{n}+n-D}^{l_s-l+1} \\
& \sum_{n_i=\mathbf{n}+l_s}^n \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_s - 1)!}{(j_s - j_{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_s - n - l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_s+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_{z=1}^{POSD} = & \sum_{k=0}^{l_i} \sum_{j_s=j^{sa}-j_{sa}+1}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-k+1} \\ & \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\sum_{k=0}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!} \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - 1)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} - s)!} \cdot \\
& \sum_{k=1}^{i-1} \sum_{(j_s=j^{sa}-\mathbf{l}_{sa}+1)}^{(i)} \sum_{j_{sa}=j_{sa}+1}^{j_s+1} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}}^{n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-1} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}_{is}+j^{sa}-j_{sa}^{ik}}^{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^i \sum_{(j_s=1)}^{(i)} \sum_{j_{sa}=j_{sa}}^{(i)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(i)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(i)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=0}^{l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j_{sa}-k} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_s-j_{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=0}^l \sum_{(j_s=1)}^{()} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!}$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - 1)!}{(D + j_{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(D+l_s+s-\mathbf{n}-l_i)} \sum_{(j_{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(D+l_s+s-\mathbf{n}-l_i)}$$

$$\sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(j_s-j_{sa}-1)} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(j_s-j_{sa}-1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(D+l_s+s-\mathbf{n}-l_i)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(D+l_s+s-\mathbf{n}-l_i)}$$

$$\frac{(n_{ik} + j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - 1 \wedge$$

$$j_s - j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i-n_{sa}-1)!}{(j_s-2)! \cdot (n_i-n_{sa}-j^{sa}+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{is}+j_{sa}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} + \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i-n_{sa}-1)!}{(j^{sa}-2)! \cdot (n_i-n_{sa}-j^{sa}+1)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n-s)!} - \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} (n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_s - s - j_s)!}.$$

$$\frac{(l - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_s - j_{sa})! \cdot (\mathbf{n} + j_s - j^{sa} - s)!}.$$

$$\sum_{i=1}^l \sum_{(j_s=1)}^l \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_{ik}=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$(D > \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + s \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} - j_{sa} - s \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - \mathbf{n} - l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa})) \wedge$$

$$D \leq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: Z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-k+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-s)}^{(\quad)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_s-s-j_s)!} \cdot \\
& \frac{(l-k-1)!}{(l_s-j_s-k-1)! \cdot (l-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+s-\mathbf{n}-j_{sa})! \cdot (\mathbf{n}-j_{sa}-j^{sa}-s)!} \cdot
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} - l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbf{n} \geq 0 \wedge$$

$$j_s \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$\mathbf{s}: \{j_s^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq 3 \wedge \mathbf{n} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\begin{aligned}
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!} \cdot \\
& \sum_{i=1}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=1}^{()} \frac{(n_{is} - j^{sa} - l_{sa} - k + 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \\
& \sum_{k=1}^{i^{l-1} (l_{sa} - k - j_{sa} + 2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\mathbf{l}}^{(\quad)} \sum_{j_s=1}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} n_{sa=n_{ik}-j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} - s - 1)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^{ik} - 1 + \mathbf{n} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - 1 = \mathbf{l}_i \wedge \mathbf{l}_{ik} \wedge \mathbf{l}_i \wedge j_{sa} - s > 0 \wedge$$

$$\mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{sa} \leq j_{sa}^i - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}, j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_Z: Z = \dots \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\begin{aligned}
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!} \cdot \\
& \sum_{i=1}^{l_s} \sum_{j_s=1}^{(j_s)} \frac{(n_{is} - n_{sa} - j^{sa} - k + 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \\
& \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_{is}-j_s+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(j_s)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\mathbf{l}_i}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} n_{sa=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} - s - 1)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^{ik} - 1 + \mathbf{n} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} - \mathbf{l}_{ik} \wedge \mathbf{l}_i - j_{sa} - s = \mathbf{l}_i \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} + j_{sa}^{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{is} \leq j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^{is}, \mathbb{k}, j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq \mathbb{k} \wedge \mathbf{s} = s + \mathbb{k}.$$

$$\mathbb{I}_{\mathbf{Z}}: Z = \mathbf{Z} \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{\mathbf{l}}-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \frac{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1}{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\begin{aligned}
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \frac{(l_{ik} - k - j_{sa}^{ik} + 2)!}{(l_{ik} - k - j_{sa}^{ik} + 2)! \cdot (j_s - l_{ik} - j_{sa}^{ik} + 2)!} \cdot \sum_{n_i=n+l_k}^{n+l_k-1} \sum_{n_{sa}=n+l_k-j_s+1}^{n+l_k-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n-j^{sa}+1} \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^l \sum_{j_s=1}^{()} \frac{l_i + j_{sa} - l_i^{l-s+1}}{j^{sa} = l_i + n + j_{sa} - D - s} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i - j^{sa} - k + 1)}
\end{aligned}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+\mathbf{n}+j_{sa}-j_s+1)}^{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+\mathbf{n}+j_{sa}-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+\mathbf{n}+j_{sa}-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+\mathbf{n}+j_{sa}-j_s+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+\mathbf{n}+j_{sa}-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+\mathbf{n}+j_{sa}-j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa} - \mathbf{n} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa} - \mathbf{n} - j_s - s - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} - \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$\mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}.$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{j^{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \frac{(n_i - j_{sa} - 2)!}{(n_i - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j}^{D-s} &= \sum_{k=1}^{i-1} \frac{(l_i - D - s)!}{(l_i - k - 1)!} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_i+j_{sa}-i^{l-s}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s-j_s)!} \cdot \frac{(n+j_{sa}^s-j_s-j_s)!}{(l_s-j_s-1)!} \\
& \frac{(l_s-j_s-1)!}{(l_s-j_s-k+1) \cdot (j_s-2)!} \\
& \frac{(D-j_s)!}{(D+j^{sa}+s-n-j_{sa}-j_{sa}^s-j_s)!} \cdot \frac{(n+j_{sa}-j^{sa}-s)!}{(n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + l_s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + l_s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1 \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} - \mathbb{k}}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{j^{sa} = l_{ik} + j_{sa} - k - j_{sa}^{ik} + 2}^{l_{sa} - k + 1} \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=j_{sa}}^{(n_i-j^{sa}-\mathbb{k})} \frac{(n_i-j^{sa}-\mathbb{k})!}{(j^{sa}-2)! \cdot (n_i-j^{sa}-\mathbb{k}+1)!} \cdot \\
& \frac{(n_i-j^{sa}-\mathbb{k})!}{(n_i-j^{sa}-n-\mathbb{k})! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_{sa}-l_s-j^{sa}-\mathbb{k})!}{(l_{sa}-j^{sa}-l_s+1)! \cdot (j_s-j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_i-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{sa}-j_{sa}-j^{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{(l_{sa}-i^{l+1})} \sum_{j^{sa}=j_{sa}}^{(n_i-j^{sa}-\mathbb{k})}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{(\quad)}{n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} - 1 \wedge$$

$$j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: (\mathbb{k} - \mathbb{k}, j_{sa}, \dots, j_{sa}^i)$$

$$j_s \geq 3 \wedge j_s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: \mathbb{Z} - 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i_l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l_s} \sum_{j_s=2}^{l_{sa}-i^{l_s}} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^{l_s}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-l_k+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_s - k)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s - j_s)!}$$

$$\sum_{l=1}^{\binom{n}{l}} \sum_{j_s=1}^{\binom{n}{j_s}} \sum_{a=j_{sa}}^{\binom{n}{a}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n (n_{ik}=n_i+j_{sa}^{ik}-j_{sa}^{ik}+1) n_{sa}^{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{()} \sum_{i=1}^{n - l^{l+1}} \sum_{j^{sa} = \mathbf{n} - D}^{\mathbf{n} - l^{l+1} + \mathbf{n} - D} \\
& \sum_{n_i = \mathbf{n} - l^{l+1} + \mathbf{n} - j_{sa} + 1}^n \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_i - j_{sa} + 1)} \\
& \frac{(n_i - j_{sa} - 2)!}{(n_i - n_{sa} - j_{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{+l_s + s - \mathbf{n} - l_i} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{j^{sa} = j_s + j_{sa} - 1} \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & S_{l_s, j_{sa}}^{DOSL} \sum_{i=1}^{l-1} \sum_{(j)}^{(j^{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_s + j_{sa} - k + 1} \\
& \sum_{n_i = \mathbf{n} + \mathbb{K}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{K} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} - \mathbb{K}}^{n_{is} + j_s - j^{sa} - \mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa} = l_{ik} + \mathbf{n} + j_{sa} - D - j_{sa}^{ik}}^{l_{ik} + j_{sa} - i^l - j_{sa}^{ik} + 1} \\
& \sum_{n_i = \mathbf{n} + \mathbb{K}}^n \sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_i - j^{sa} - \mathbb{K} + 1)} \\
& \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s-j_s)!} \cdot \frac{(n+j_{sa}^s-j_s)!}{(l_s-j_s+1)!} \cdot \frac{(l_s-j_s+1)!}{(l_s-j_s+1) \cdot (j_s-2)!} \cdot \frac{(D-j_s)!}{(D+j_{sa}+s-n-j_{sa})!} \cdot \frac{(n+j_{sa}-j_{sa}-s)!}{(n+j_{sa}-j_{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - j_{sa} - 1$$

$$D - n < n \wedge n - \mathbb{k} \geq 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa} - 1$$

$$\{j_{sa}^s, \mathbb{k}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s_{sa} - 1$$

$$\mathbb{k}_Z = 1$$

$$\begin{aligned}
f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l_s} \sum_{(j_s=l_{ik}-D-j_{sa}^{ik}+1)}^{(l_s-1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}^{ik}+1} \\
& \sum_{n_{is}=n+l_k-j_s+1}^n \sum_{n_{sa}=n+l_k-j_s+1}^{n_{is}+j_s-j^{sa}-l_k} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{(j_s=1)}^{(l_s-1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+1)}^{(l_i-k+1)} \sum_{(j_{sa}=n_{ik}+j_{sa}^s-j_{sa}^{ik}+1)}^{(D-j_{sa}^{ik}+1)} \sum_{j_{sa}=1}^{j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^s - j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^s - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - l_i) \leq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s}^{DO} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_s+j_{sa}-k} \\ &\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(n - k - 1)!}{(n - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-i^{l-s}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^{s}-j_{sa}^{ik}+n+j_{sa}-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1) \cdot (j_s-2)!} \cdot \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - 1) \vee \\
& ((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee \\
& ((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge
\end{aligned}$$

$$D \geq n < n \wedge I = \mathbb{K} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{j_{sa} = l_s + j_{sa} - k} \sum_{j_{sa} = l_s + j_{sa} - k}^{j_{sa} = l_s + j_{sa} - k} \frac{(j_{sa} - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j_{sa} = l_s + j_{sa} - k + 1}^{l_{sa} - k + 1} \sum_{n_i = n + \mathbb{K}}^n \sum_{(n_{is} = n + \mathbb{K} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-k}^{l_{sa}-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{sa}=\mathbf{n}+j^{sa}-\mathbb{k}+1}^{j^{sa}-\mathbb{k}+1}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - n_{sa} - 1)! \cdot (n_i - n_{sa} - j^{sa} + 1)!}.$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^l, j_{sa}^{l-1}, \dots, j_{sa}^1\} \wedge$$

$$s \geq 3 \wedge s \neq j_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k}_{Z^+} \geq 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=0}^{l-1} \sum_{(j_s+\mathbf{n}-D-s+1)}^{-(k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\sum_{k=1}^{\infty} \sum_{l=1}^{\infty} \sum_{j_s=1}^{\infty} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l^{s+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{sa}=n-j_{sa}}^{(n_i-j_{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n - 1)!}{(n_{sa} + j^{sa} - n - \mathbb{k} - j_s + 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - j_s - j_{sa} + 1)!}{(l_s - j_s - l_{sa} + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j^{sa} - n - l_{sa})!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=1}^{(l_s-k+1)} \sum_{j_{sa}=n-D-s+1}^{j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_i-j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j_{sa}}^{DOSD} = & \binom{D+l_s+j_{sa}-n-l_{sa}}{k} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{(n_{is}+j_s-j_{sa}^{ik}+1)} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{(n_{is}+j_s-j_{sa}^{ik}-\mathbb{k})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{sa} - \mathbb{k} - 1)!}{(j_{sa}^{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^{ik} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^{ik} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \right) + \\ & \binom{D+l_s+j_{sa}-n-l_{sa}}{k=1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_{sa}-j_{sa}^{ik})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{is}+j_s-j_{sa}^{ik}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \end{aligned}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(l_{ik}-k-j_{sa}^{ik}+2)}^{(l_{ik}-k-j_{sa}^{ik}+1)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+2)} \sum_{(n_{is}=n+\mathbb{k})}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_s - 1)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - l_s - 1)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_s-j^{sa}-j_{sa}+1) \leq l_{ik} \leq l_i} \sum_{a=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{ik}-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} - j_{sa}^{lk} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$L = j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{l_{sa}+n-D-j_{sa}} \sum_{j_{sa}=l_{sa}+n-D-j_{sa}+1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{sa}+n-D-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \right)$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j_s=l_{ik}+\mathbf{n}-j_{sa}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (n_{is} + j_{sa} - j^{sa} - 1)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{j_s=0}^{(l_{ik}-k-j_{sa}^{ik})} \sum_{j_{sa}=0}^{(n_{is}+j_s-n_{sa}-j^{sa}-1)} \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}+\mathbb{k}-j_{sa}+1}^{(n_{is}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik} \atop (n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} - j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_{sa})! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_s^i - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_s^i \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right. \\
 & \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \right)
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n-j_s+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!}.$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+\mathbf{l}_s+s-\mathbf{n}-\mathbf{l}_i} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-j^{sa})}^{()} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-j^{sa})}^{(\mathbf{l}_s+j_{sa}-j^{sa})}.$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i=j_s+1, \dots, n_i=\mathbf{n}+\mathbb{k})}^{(n_i-j_s+1)}.$$

$$\sum_{n_{ik}=n_{is}+j_s^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}.$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_s - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$D \geq \mathbf{l}_i < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_s^i - j_{sa} \wedge$$

$$j_s + 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_s \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} j^{sa} = j_s + j_{sa} - \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \right)$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(j_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} j^{sa} = j_{sa}-1$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+k-j_s+1}^{n_{is}=n+k-j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{ik} + j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^{sa} + j_{sa}^{ik} - n_{ik} - j_{sa} - k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{K} \wedge$$

$$\mathbb{K}_Z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j_s=l_s+\mathbf{n}-D}^{j_s=j_{sa}-j_{sa}} \sum_{j_{sa}=l_{sa}+\mathbf{n}-D}^{j_{sa}=l_s-k} \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_{sa} - \mathbb{K} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{K})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} \right) + \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{sa}+\mathbf{n}-D}^{l_s+j_{sa}-k} \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \right)$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{i=l_s+1}^{l_s-k+1} \sum_{j_{sa}=l_{sa}-k+1}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}-(n_i-j_s+1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{sa}=\mathbf{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{D-\mathbf{n}+1} \sum_{j_s=l_s+\mathbf{n}-D}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_s + 1)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - \mathbf{n} - l_i - j_s + 1)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+l_s+s-l_i} \sum_{(j^{sa}-j_{sa}+l_{sa}-j_s=k)} \sum_{(n_{is}=n+l_{sa}-j_s-k)}^{n_{is}=n+l_{sa}-j_s-k}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_s^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 - j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\},$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{\mathbf{s}}^{SD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right)$$

$$\sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) +$$

$$\left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} + l_{sa} - j_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\begin{aligned}
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-k}^{l_{sa}-k+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s-j_{sa}+1)}^{(n_i-j_s-j_{sa}-k)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i + j_s - n_{sa} - k - 1)!} \cdot \\
& \frac{(n_{sa} - n_{sa} - n - 1)!}{(n_{sa} - n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$\sum_{j_s=j^{sa}-j_{sa}+1}^{D-\mathbf{n}+1} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{K}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{j_s=j^{sa}-j_{sa}+1}^{l_{sa}-k+1} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-s)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - s = l_{ik} \wedge l_{ik} - j_{sa} - s > 0 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} \wedge$$

$$\mathbb{k}_z = 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \frac{(j_{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}{n_{ik}+j_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}-\mathbb{K}-j_s)}!$$

$$\sum_{n_i=\mathbf{n}+j_{sa}-j_{sa}^{ik}-j_s+1}^n \sum_{n_{is}=\mathbf{n}+\mathbb{K}-j_s+1}^{(j_s-1)}$$

$$\sum_{n_{ik}+j_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}-\mathbb{K}-j_s)}^{(n_{ik}+j_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}-\mathbb{K}-j_s)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}$$

$$\frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}-\mathbb{K}-j_s)!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}-\mathbb{K}-j_s)! \cdot (\mathbf{n} + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{n} > D - \mathbf{n} + 1 \wedge$$

$$2 \leq i_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$i_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D > \mathbf{n} < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_s+n+j_{sa}-D-1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - j_{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa} - 1)!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - j_{sa} - l_s - s)!}{(n + j_{sa} - n - l_s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
& \sum_{i=1}^{D+l_s-n-l_i} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
& \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_{sa}+\mathbf{n}-j_{sa}+1)}^{(\mathbf{l}_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(\mathbf{l}_{sa}-k-j_{sa}+2)} \frac{\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(n_{is}+j_s-j_{sa}-1)} \frac{(n_i-j_s+1)!}{(n_i-j_s+1)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s-j_{sa}-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \frac{(\mathbf{l}_s-k-1)!}{(\mathbf{l}_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-\mathbf{l}_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-\mathbf{l}_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}-s)!} - \\ & \sum_{k=1}^{D+\mathbf{l}_s+s-\mathbf{n}-\mathbf{l}_i} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(\mathbf{l}_{sa}-k-j_{sa}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(\mathbf{l}_{sa}-k-j_{sa}+2)} \frac{\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \frac{(n_i-j_s+1)!}{(n_i-j_s+1)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s-j_{sa}-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j_{sa})!} \cdot \frac{(\mathbf{l}_s-k-1)!}{(\mathbf{l}_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-\mathbf{l}_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-\mathbf{l}_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}-s)!} - \\ & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\mathbf{l}_{sa}-k-j_{sa}+2)} \frac{(n_{ik}+j_{sa}^s+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}^s+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$f_{j_s, j_{sa}}^{s, D} = \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s-j_s)! \cdot (n+j_{sa}^s-j_s-j_s)!} \cdot \\
& \frac{(l_s-k+1)!}{(l_s-k+1) \cdot (j_s-2)!} \cdot \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa}-j_{sa}^s-j_s)! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_s - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^i \leq j_{sa}^i - 1, j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$\geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}-\mathbb{k}}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_i+\mathbf{n}-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_{is}-j_s+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s}^{(n_{is}-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{(n_{is}-j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa} - j_s - \mathbb{k} - j_{sa})! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$Z \leq j_s \leq j_s - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j_s - \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$\mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$f_Z^{SDSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{j_s=j_s+1}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n+1}^{()} \sum_{(n_{sa}=n+1)}^{()} \sum_{j_s=j_s+1}^{(n+j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j^{sa} - n - l_i - j_{sa})!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^i, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa} \geq 4 \wedge j_{sa} - s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(D + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=0}^{D-n+1} \sum_{(i=n-D-s+1)}^{(l_{ik} - j_{sa}^{ik} + 2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_{sa}^{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}-\mathbb{k})} \\
& \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s-j_s)!} \cdot \frac{(n+j_{sa}^s-j_s-j_s)!}{(l_s-j_s-1)!} \\
& \frac{(l_s-j_s-1)!}{(l_s-j_s-k+1) \cdot (j_s-2)!} \cdot \frac{(D-j_s)!}{(D+j_{sa}+s-n-j_{sa})!} \cdot \frac{(n+j_{sa}-j_{sa}^s-s)!}{(n+j_{sa}-j_{sa}^s-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{s, j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s_{ik}}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \\
& \frac{(l_s - k - j_s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n, I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s}^{(n_{is}+j_{sa}^s)} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})}^{(n_{is}+j_{sa}^s-j_s+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j^{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \\
& \frac{(l_s - k - j_s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n \wedge l_s > 0 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} < n + j_{sa} - s \wedge$$

$$l_s - j_{sa}^{ik} + j_{sa}^{ik} \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l_s = 0 \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, \mathbb{k}, \dots, j_{sa}^i\} \quad S: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > n \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-k+1}^{n-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{j_{sa}^{ik}+1} \\
& \sum_{j_s+l_{sa}-j^{sa}-l_s=n+\mathbb{k}-j_s+1}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-s)}^{(\quad)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_s-s-j_s)} \cdot \\
& \frac{(l-k-1)!}{(l_s-j_s-k-1)! \cdot (l-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n-j_{sa}-j^{sa}-s)}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - s = l_{ik} \wedge l_{ik} - j_{sa} - s = \quad \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} \wedge$$

$$\mathbb{k}_z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}^{ik}+1}^{(j_s+j_{sa}-j^{sa}+1)_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\mathbb{k}+j_s-1)}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \sum_{j^{sa}=1}^{j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{is} - \mathbb{k} - 1)!}{(j_s - j_s - \mathbb{k} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(j_s+j_{sa}-j^{sa}+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s - \mathbb{k} > -\mathbb{k} \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^i, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{l_s=n-D}^{j_s-k+1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^{ik}-(n+j_{sa}-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1) \cdot (j_s-2)!} \cdot \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_i+\mathbf{n}-D-s)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-$$

$$\sum_{n_i=n}^n \sum_{n_i=n}^{(n+j_s+1)} \sum_{n_i=n}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n}^{(n+j_s+1)} \sum_{n_{ik}=n}^{(n+j_s+1)} \sum_{n_{ik}=n}^{(n+j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_{sa}^{ik} - s - l_s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_{sa}^{ik} - s - l_s)! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{K} \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^i, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{K}$$

$$\mathbb{K}: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{D-\mathbf{n}+1} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(j^{sa}-j_{sa}+1)} \sum_{j_{sa}=\mathbf{l}_{sa}+\mathbf{n}-D}^{\mathbf{l}_s+j_{sa}-k} \\ &\sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{(j^{sa}=l_s+l_{sa}-k+1)}^{(l_s-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+\mathbb{k})}^{(n-j_s+1)} \\
& \frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-1)! \cdot (j_s+1)!} \cdot \\
& \frac{(n_{sa}-1)!}{(j_s-1)! \cdot (n_{sa}+j_s-j^{sa}-\mathbb{k})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j_s-j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}
\end{aligned}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}.$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{i_s, j_{sa}}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{l_s=l_s+n-D-j_{sa}+k}^{(l_{sa}+n-D-j_{sa}+k)} \sum_{l_{sa}=l_{sa}-k+1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_s - 1)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_i - j_s - 1)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_{sa}-\mathbf{n}-l_i} \sum_{j_s=l_i+\mathbf{n}-k+1}^{l_s-k+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_s+l_{sa}-1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$l_s - j_s - k + 1 \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{i l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+1)}^{(n_i-j_s)} \sum_{(n_{sa}=n-j_{sa}+\mathbb{k})}^{(n_{is}+j_{sa}-j_{sa}-\mathbb{k})} \frac{(n_i-n_{sa}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+1)!} \cdot \\ \frac{(n_{is}-n_{sa}+\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_{sa}-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \\ \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \\ \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ \left. \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} + \right. \\ \sum_{k=1}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j_{sa}=j_{sa}}^{(\quad)} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{sa}-\mathbb{k}+1)} \\ \frac{(n_i-n_{sa}-\mathbb{k}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}-\mathbb{k}+1)!} \cdot \\ \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \\ \left. \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n-s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_s - l_{sa} - s)!}{(l_s + j^{sa} - \mathbf{n} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{sa}=n+\mathbb{k}-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k})} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j^{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{l-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{j^{sa}=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}$$

$$D \geq \mathbf{n} < n \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S^{D+2} = \left(\sum_{k=1}^{i^l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k})}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - 1)!} \cdot$$

$$\frac{(n - j^{sa} - 1)!}{(n + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - n - l_{sa})!}{(D + j_{sa} - n - l_{sa})! \cdot (n - j^{sa} - s)!} +$$

$$\left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-j_s+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=1}^{\mathbf{l}} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_{sa}-\mathbf{l}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa})}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - j_{sa} - \mathbb{k} + 1)! \cdot (n_{sa} - j^{sa})!} \cdot \\
& \frac{(\mathbf{l}_{sa} - j_{sa} - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j_{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - \mathbf{l}_{sa})!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=1}^{\mathbf{l}} \sum_{(j_s=2)}^{(\mathbf{l}_{ik}-k-j_s-2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\mathbf{l}} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right)$$

$$\sum_{(j_s=j_{sa}-j_{sa}+1)}^{\binom{()}{j_s=j_{sa}-j_{sa}+1}} \sum_{j_{sa}=l_{sa}+\mathbf{n}-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+j_s-k-j_{sa}^{ik}+1}^{l_{ik}-k-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_s-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{l-1} \sum_{j_s=1}^{(l_{ik}-k-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - k + 1)! \cdot (n_{sa} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^l \sum_{j_s=1}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \frac{(n_i - j^{sa} - k + 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - k + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOSD} = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right. \\
& \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_{sa}-j_s+1}^{n_{is}+j_s-j^{sa}} \\
& \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-l_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa}-l_{sa})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \left. \frac{(D+l_s+j_{sa}-n-l_{sa}-s)!}{(D+l_s+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \right) + \\
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_{sa}} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-l_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa}-l_{sa})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
& \left. \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \right)
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=D+l_s+j_{sa}-\mathbf{n}-l_{sa}+1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{(j_s - l_i)} \sum_{i=1}^{(j_s - l_i)} \sum_{j^{sa}=n-D}^{n-l_i+1} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i - j_s + 1)} \\
& \frac{(j_s - 2)! \cdot (n - n_{sa} - j^{sa} - k + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) - \\
& \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(j_s-l_i)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_j^{l_{sa}} S_{sa}^D &= \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \right. \\ &\quad \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\ &\quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ &\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\quad \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}+j_s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \wedge D + l_s + j_{sa}^{ik} - j_{sa} - 1$$

$$D \wedge n < n \wedge \mathbb{k} > 0$$

$$j_{sa}^{i-1} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{2L} = 1$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \right)$$

$$\sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \left(\sum_{j_s=\mathbf{n}-j^{sa}+1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j_s=\mathbf{n}-j^{sa}+1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=2}^{(l_s-k+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{\binom{D}{\mathbf{l}}} \sum_{(j_s=1)}^{\binom{D}{\mathbf{l}}} \sum_{j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{\mathbf{l}_{ik}+j_{sa}-\mathbf{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_s=\mathbf{n}+j_{sa}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{K})}$$

$$\frac{(n_i - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - \mathbf{l}_i - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(j_{sa} - \mathbf{l}_s - j^{sa} - \mathbf{l}_s + 1)!}{(j_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j_s - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - \mathbf{l}_{sa})!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=1}^{D+\mathbf{l}_{sa}-\mathbf{n}-\mathbf{l}_i} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{\binom{D}{\mathbf{l}}-k+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{\binom{D}{\mathbf{l}}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{K})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{K} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} > n \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = n + \mathbb{K} \wedge$$

\Rightarrow

$$fzS_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)} l_s + j_{sa} - k \sum_{j^{sa}=j_{sa}+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_s=2)}^{i l_s - l_s - k + 1} \sum_{j^{sa}=l_s+j_{sa}-k+1}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^n \sum_{i=1}^{()} \sum_{j^s=1}^{l_s - i^{l+1}} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{K}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{K} + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - j^{sa} - \mathbb{K} + 1)! \cdot (n_i - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j^{sa} - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} + s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j^{sa}-1} \sum_{j_s=j^{sa}-j_{sa}+1}^{j^{sa}-1} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{K})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{K} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^n \sum_{i=1}^{()} \sum_{j^s=1}^{l_s - i^{l+1}}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(\quad) \\ (n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1)}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j_{sa}^{sa} = j_{sa} - 1}^{l_{sa} - k + 1} \\ &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s - 1)} \sum_{n_{sa} = n - j_{sa} - 1}^{(n_{is} + j_s - j_{sa} - \mathbb{k})} \\ &\frac{(n_i - j_s - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j^{sa} - l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\ &\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa} - i^{l+1}} \sum_{j_{sa}=j_{sa}}^{l_{sa} - i^{l+1}} \\ &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - j^{sa} - \mathbb{k} + 1)} \\ &\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n+j_s+1)} \sum_{n_i=\mathbf{n}+1}^{(n+j_s+1)} \sum_{n_{ik}=\mathbf{n}+j_{sa}-j_{sa}^{ik}}^{(n_{sa}=\mathbf{n}+j_{sa}-j_{sa}^{ik})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{()} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{K} > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^i, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = n + \mathbb{K} \wedge$$

$$\mathbb{K}_Z: \dots \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - s)!} + \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_{is} + j_s - j^{sa} - \mathbb{k})} \sum_{j_s = 2}^{(j_s)} \sum_{j^{sa} = j_{sa}}^{(j_s)} \sum_{l_s = j_s}^{(j_s)} \sum_{l_{sa} = j_{sa}}^{(j_s)} \sum_{k=1}^{l-1} \sum_{j_s=2}^{(j_s)} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-k} \left(\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \right. \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \right) + \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_{is} + j_s - j^{sa} - \mathbb{k})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_s-j_s-k+1}^{l_s-k+1} \frac{(n - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_{ls} - j_s + 1)!} \cdot \\
& \sum_{n_i=n-\mathbb{k}}^n \sum_{(n_{ls}=n+\mathbb{k}-j_s)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n-j^{sa}+1)} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_s-k+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=1}^{l-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-k} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n_{ik}+j^{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_s-s-\mathbb{k})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_s - s - \mathbb{k})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^l \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(\quad)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_s - s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{K} > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = n + \mathbb{K} \wedge$$

$$\mathbb{K}_Z: \dots \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{K}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{K}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - s)!} + \\
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_{is} + j_s - j^{sa} - \mathbb{k})} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \Bigg) + \\
& \left(\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \right. \\
& \left. \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \right. \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_{sa}-i^{l+1})} \sum_{j^{sa}=j_s+1}^{j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \frac{(j_s - 2)! \cdot (n - n_{sa} - j^{sa} - \mathbb{k} + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) - \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(l_s-k+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^n \sum_{l_i=1}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{()}^{()} \sum_{n_{sa}=n_{ik}-j_{sa}-l_k}^{n_{ik}-j_{sa}-l_k}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - l_i - s - 1)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik} - 1 + l_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - l_i - l_i)! \cdot (n - s)!}.$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} DQSD = & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{j_s=2}^{l_s+j_{sa}-k} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}} \right. \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ & \left(\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=2)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-k} \right) \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - \mathbf{k} - 1)!}{(l_s - j_s - \mathbf{k} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=1}^{D+l_s+j_{sa}-\mathbf{n}-l_s} \sum_{(j_s=2)}^{(l_s-\mathbf{k}+1)} \sum_{j^{sa}=l_s+j_{sa}-\mathbf{k}+1}^{l_{sa}-\mathbf{k}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - \mathbf{k} - 1)!}{(l_s - j_s - \mathbf{k} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - l_s - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{sa}+n-D} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^{s} + (n + j_{sa}^{s} - j_s)! \cdot (l_s - k - 1)! \cdot (j_s - 2)! \cdot (D - s)!} \cdot \frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D+l_s-n-l_{sa}} S_{j_s, j_{sa}}^{DOS} \\ & \sum_{j_s=j_{sa}+n-D-j_{sa}+1}^{(l_s-j_s+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left(\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=2)}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{j^{sa}=l_{sa}+\mathbf{n}-D}^{l_{sa}-k+1} \right. \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - \mathbf{n} - l_{sa} - j^{sa} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-k+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=D+l_s+j_{sa}-n-l_{sa}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(n - j_s - k + 1)!}{(n - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i^{l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s-j_s-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1) \cdot (j_s-2)!} \cdot \\
& \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$\begin{aligned}
& ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \wedge \\
& D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\
& D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee \\
& (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
& 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge
\end{aligned}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D-j_s+1}^{l_{sa}-k+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\ & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l_s} \sum_{j_s=j^{sa}-j_{sa}+1}^{j^{sa}-l_s} \sum_{j^{sa}=l_s+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
& \frac{(j_s - 2)! \cdot (n - n_{sa} - j_s - \mathbb{k} + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_s - n - l_{sa}} \sum_{j_s=j^{sa}-j_{sa}+1}^{j^{sa}-l_s} \sum_{j^{sa}=l_s+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_{z=1}^{POSD} = & \sum_{k=0}^{l_i} \sum_{j_s=j^{sa}-j_{sa}+1}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-k+1} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\sum_{k=0}^{(\quad)} \sum_{j_s=1}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \\
& \sum_{k=1}^{l-1} \sum_{(j_s=j^{sa}-k+1)}^{(n_i-j^{sa}-k+1)} \sum_{j_{sa}=j_{sa}+1}^{(n_i-j^{sa}-k+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}}^{(n_i-j^{sa}-k+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j^{sa}-k+1)} \\
& \sum_{n_{ik}=n_{is}+j^{sa}-j_{sa}}^{(n_i-j^{sa}-k+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j^{sa}-k+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l-1} \sum_{(j_s=1)}^{(n_i-j^{sa}-k+1)} \sum_{j_{sa}=j_{sa}}^{(n_i-j^{sa}-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n_i-j^{sa}-k+1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_i-j^{sa}-k+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=0}^{l-1} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{-(j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j_{sa} - s)!} + \sum_{k=0}^{()} \sum_{(j_s=1)}^l \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}.$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\frac{(n_{ik} + j_{sa}^s + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^s + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (j_s-j^{sa}-\mathbb{k})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}+j_{sa}-j^{sa}-s)!} + \\
 & \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
 & \frac{(n_i-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-2)! \cdot (n_i-n_{sa}-j^{sa}-\mathbb{k}+1)!} \cdot \\
 & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \cdot \\
 & \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-\mathbf{n}-l_{sa})! \cdot (\mathbf{n}-s)!} - \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}
 \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-s)}^{(\quad)} \\
& \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_s-s-j_s)!} \cdot \\
& \frac{(l-k-1)!}{(l_s-j_s-k-1)! \cdot (l-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_s-j_{sa})! \cdot (\mathbf{n}+j_s-j_{sa}-s)!} \cdot \\
& \sum_{i=1}^l \sum_{(j_s=1)}^l \sum_{j_{sa}=j_{sa}}^{(\quad)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(\quad)} \\
& \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-\mathbf{n}-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+s-\mathbf{n}-l_i)! \cdot (\mathbf{n}-s)!}
\end{aligned}$$

$$\begin{aligned}
& (D > \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge \\
& 1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge \\
& j_s + j_{sa} - 1 \leq j_{sa} \leq \mathbf{n} - j_{sa} - s \wedge \\
& l_{ik} + j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
& (D + s - \mathbf{n} - l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa})) \wedge \\
& D \leq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge
\end{aligned}$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - \mathbb{k})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - \mathbb{k})!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa} - s)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{(\quad)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
 & \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} - \\
 & \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s}^{l_{sa}-k+1}
 \end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\cdot)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_s-s-j_s)!} \cdot \\
& \frac{(l-k-1)!}{(l_s-j_s-k-1)! \cdot (l-2)!} \cdot \\
& \frac{(D-l_i)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n-j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} - l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = l_s > 0 \wedge$$

$$j_s \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - l_{sa} - s)!} \cdot$$

$$\sum_{i=1}^{l_s} \sum_{j_s=1}^{(j_s)} j^{sa} \cdot$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} j^{sa+1}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}} \cdot$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(j_s)} \cdot$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^{n-l_i} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{()}^{()} \sum_{n_{sa}=n_{ik}-j_{sa}-l_k}^{n_{ik}-j_{sa}-l_k}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - i - s - 1)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik} - i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i - s - 1 = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, l_k, j_{sa}^i, \dots, j_{sa}^i\} \wedge s \in \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + l_k$$

$$l_k: Z = \dots \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!} \cdot$$

$$\sum_{i=1}^{l-1} \sum_{(j_s=1)}^{()} j^{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n+\mathbb{k}-j_s+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} j^{sa+1}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} - s - 1)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^{ik} - 1 + (n - s))!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k} = l_{ik} \wedge l_i - j_{sa} - s = -\mathbb{k} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n + j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i - j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i, \dots, j_{sa}^i\} \cap \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k}$$

$$\mathbb{N}_Z: Z = \dots \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_i + n + j_{sa} - D - s} n_{is} + j_s - j^{sa} - \mathbb{k} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1} (n_i - n_{is} - 1)! \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l-1} \frac{(l_{ik} - k - j_{sa}^{ik} + 2)!}{(l_{ik} - k - j_{sa}^{ik} + 2)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 2)!} \cdot \sum_{n_i = \mathbf{n} + \mathbb{k}}^{l_i - 1} \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{l_i} \frac{(l_i + j_{sa} - i^{l-s+1})!}{(j^{sa} - l_i + \mathbf{n} + j_{sa} - D - s)!} \cdot \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \frac{(n_i - j^{sa} - \mathbb{k} + 1)!}{(n_{sa} = \mathbf{n} - j^{sa} + 1)!} \cdot$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \frac{(n_i - j^{sa} - \mathbb{k} + 1)!}{(n_{sa} = \mathbf{n} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}.$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - l_s + 1)!}.$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+n+j_{sa}-s)}^{(j_s=j^{sa}-j_{sa}+1, \dots, j_{sa}=l_i+n+j_{sa}-s)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}, \dots, n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}, \dots, n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}, \dots, n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}, \dots, n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}, \dots, n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}, \dots, n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_s - s - \mathbb{k} - j_s)! \cdot (n + j_{sa} - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq l_i < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j^{sa} = n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1} (j^{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{is} + j_s - j^{sa}} \\
 & \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - k - j_{sa}^{ik} + 2}^{l_{sa} - k + 1} \\
 & \sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{j^{sa}-n-l_{sa}} \sum_{i=1}^{(j^{sa}-n-l_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \frac{(n_i - j_s + 1)!}{(n_i + n_{is} - n + k - j_s + 1)!} \cdot \\
& \frac{(j_s - 2)! \cdot (n - n_{sa} - j_s - k + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s=j^{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \frac{(n_i - j_s + 1)!}{(n_i + n_{is} - n + k - j_s + 1)!} \cdot \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j}^{D-s} &= \sum_{k=1}^{l-1} \frac{(l_i - D - s)!}{(k-2)!} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_i+j_{sa}-i^{l-s+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k})}^{(\cdot)} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s-j_s)!} \cdot \frac{(n+j_{sa}^s-j_s-j_s)!}{(l_s-j_s-1)!} \\
& \frac{(l_s-j_s-1)!}{(l_s-j_s-k+1) \cdot (j_s-2)!} \\
& \frac{(D-j_s)!}{(D+j^{sa}+s-n-j_{sa}-j_{sa}^s-j_s)!} \cdot \frac{(n+j_{sa}-j^{sa}-s)!}{(n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{ik} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{ik} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + j_{sa} - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} l_{ik+j_{sa}-k-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - n - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} l_{sa-k+1} \sum_{j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2}^{l_{sa}-k+1} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{K}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{K})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{\mathbf{l}} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{\mathbf{l}_{sa}-\mathbf{l}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_{sa}+1)}^{(n_i-j^{sa}-\mathbb{K})} \\
& \frac{(n_i - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{K} + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_i + j^{sa} - \mathbf{n} - \mathbb{K})! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(j^{sa} - \mathbf{l}_s - \mathbf{l}_{sa} - \mathbb{K} - 1)!}{(j^{sa} - \mathbf{l}_s - \mathbf{l}_{sa} + 1)! \cdot (j_s - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\mathbf{l}-1} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{K}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{K})}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{K})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{K} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{\mathbf{l}} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=j_{sa}}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(\cdot) \\ (n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1)}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-l_i)!}.$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} - 1 \wedge$$

$$j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_s \geq 4 \wedge j_s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_Z: \mathbb{Z} - 1 \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOSD} = \sum_{k=1}^{i_l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{j_s=2}^{l_{sa}-i^{l-1}} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^{l-1}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s - l_i)!}.$$

$$\sum_{l=1}^{\infty} \sum_{j_s=1}^{\infty} \sum_{a=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n (n_{ik}=n_i+j_{sa}^{ik}-j_{sa}^{ik}+1) n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!}.$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n - 1) \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_{ik} + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j^{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{lk}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-k+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{(l_s - j_s - k + 1)} \sum_{i=1}^{(j_s - k + 1)} \sum_{j_{sa}=n-D}^{n-l_{sa}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
& \frac{(j_s - 2)! \cdot (n - n_{sa} - j^{sa} - k + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(l_s - j_s - k + 1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & S_{i_s, j_{sa}}^{DOSL} \sum_{i=0}^{i l-1} \sum_{j=0}^{(j^{sa}-j_{sa}+1)} \sum_{k=0}^{l_s+j_{sa}-k} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_s + j_{sa} - k + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_s + 1)}^{(n_{is} + j_s - j^{sa} - \mathbb{k})} \sum_{n_{sa} = n - j^{sa} + 1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n - j^{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (l_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{l_{ik} + j_{sa} - i^l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - j^{sa} - \mathbb{k} + 1)} \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{()} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s-j_s)!} \cdot \frac{(n+j_{sa}^s-j_s)!}{(l_s-j_s-k-1)!} \cdot \frac{(l_s-j_s-k-1)!}{(j_s-k+1) \cdot (j_s-2)!} \cdot \frac{(D-j_s)!}{(D+j_{sa}+s-n-j_{sa})!} \cdot \frac{(n+j_{sa}-j_{sa}-s)!}{(n+j_{sa}-j_{sa}-s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - j_{sa} - 1$$

$$D > n < n \wedge n - \mathbb{k} > 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^i\} \cap \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s - 1$$

$$\mathbb{k}_Z = 1$$

$$\begin{aligned}
f_Z S_{j_s, j_{sa}}^{DOSD} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=l_{ik}-D-j_{sa}^{ik}+1)}^{(l_s-1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}^{ik}+1}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=1)}^{(l_s-1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!}.$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa} - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}.$$

$$\sum_{k=1}^{D+l_s+j_{sa}-\mathbf{n}-l_{sa}} \sum_{(j_s=l_{ik}-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}=1}^{(D-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{(n_{sa}=\mathbf{n}_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()}$$

$$\frac{(D + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{ik} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - \mathbf{n} - j_{sa}^{ik}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z S_{j_s}^{DO} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j^{sa}=\mathbf{l}_s+j_{sa}-k+1}^{\mathbf{l}_i+j_{sa}-k-s+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - \mathbb{k} + 1)!}{(j_s - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(j_s - k - 1)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(\quad)} \sum_{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s}^{\mathbf{l}_i+j_{sa}-i^{l-s}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot$$

$$\frac{(\mathbf{l}_{sa} - \mathbf{l}_s - j_{sa} + 1)!}{(\mathbf{l}_{sa} - j^{sa} - \mathbf{l}_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - \mathbf{l}_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{l_s+j_{sa}-k}^{l_s+j_{sa}-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k})}^{()} \\
& \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}-j_s-s-\mathbb{k})! \cdot (n+j_{sa}-j^{sa}-j_s)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(D-n)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j_{sa}}^{DOSD} = & \sum_{k=1}^{i^{l-1} (j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{j_{sa} = l_s + j_{sa} - k} \sum_{j_{sa} = l_s + j_{sa} - k}^{j_{sa} = l_s + j_{sa} - k} \frac{(j_{sa} - j_s - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \sum_{n_i = n + \mathbb{k} - j_s}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\ & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} - k + 1} \sum_{j_{sa} = l_s + j_{sa} - k + 1}^{l_{sa} - k + 1} \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{l_{sa}-l+1} \sum_{i=1}^{n-j^{sa}-l_k+1} j^{sa}=l_{sa}+n_{ik} \\
& \sum_{i=1}^n (n_{is}=n+l_k) (n_{sa}=n_{ik}+j_{sa}^{ik}+1) \\
& \frac{(j^{sa} - 2)! \cdot (n_{sa} - l_k - 1)!}{(j^{sa} - 2)! \cdot (n_{sa} - j^{sa} - l_k + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-k} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^n \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_i-j_s+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1)) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} \neq j_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k}_{Z^+} \neq 1 \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-k-s+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=0}^{l-1} \sum_{(j_s+\mathbf{n}-D-s+1)}^{i-k+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-k-s+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l^{s+1}} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{K}+1)} \\
& \frac{(n_i - n_{sa} - \mathbb{K} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{K} + 1)!} \cdot \\
& \frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - j^{sa} - \mathbb{K} + 1)! \cdot (n_i - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j^{sa} - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} + s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{j_s=1}^{D+l_s+j_{sa}-n-l_{sa}} \sum_{(j_s=l_s-n-D-s+1)}^{(l_s-k+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n-D-s+1)} \\
& \sum_{n_i=n+\mathbb{K}}^n \sum_{(n_{is}=n+\mathbb{K}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{K})}^{()} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{K})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{K} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.1/3
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.2.1/3
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.3.1/3
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.1/2
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/228
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1/290

Bağımlı ve bir bağımsız olasılıklı farklı bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.2.1/203
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2.1/228

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2.1/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.3.1/203
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3.1/228
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3.1/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.4.1.1/3
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/3

Bağımlı ve bir bağımsız olasılıklı farklı olasılık, 2.3.1.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.4.2.1/3
toplam düzgün simetrik olasılık, 2.3.1.2.1.4.2.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.4.3.1/3
toplam düzgün simetrik olasılık, 2.3.1.2.1.4.3.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.1/207
toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.2.1/207

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.3.1/207

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.1.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.2.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.3.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.1.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.1.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.2.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.1.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.1.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.2.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.2.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.2.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.2.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.3.1/3-4

toplam düzgün simetrik olasılık,
2.3.1.2.2.2.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.1.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.4.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.4.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.4.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.1.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.6.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.6.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.6.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.7.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.7.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.7.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.7.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumda
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.3.1/3-4

toplam düzgün simetrik olasılık,
2.3.1.2.2.7.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda simetrisinin ilk
ve herhangi bir durumunun bulunabileceği
olaylara göre

simetrik olasılık, 2.3.1.1.3.1.1.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.1.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda bağımsız
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.1.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.1.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda bağımlı
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.1.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.1.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumda
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.3.2.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumda
bağımsız simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.3.2.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.2.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumda
bağımlı simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.2.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda simetrisinin
herhangi bir durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.1.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.4.1.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.4.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda bağımsız
simetrisinin herhangi iki durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.4.1.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.4.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda bağımlı
simetrisinin herhangi iki durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.4.1.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.4.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda simetrisinin her
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.1.1/838

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda bağımsız

simetrisinin her durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.2.1/838

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin her durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.3.1/838

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.1.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.5.1.1.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.2.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.5.1.2.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.5.1.3.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.1.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.5.2.1.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.2.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.5.2.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.5.2.3.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.1.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.2.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.3.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.1.1/12
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.2.1/12
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.8.2.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımlı durumlu
 bağımlı simetrinin ilk ve herhangi iki
 durumunun bulunabileceği olaylara göre
 herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.3.1/8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.8.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı durumlu simetrinin ilk
 herhangi bir ve son durumunun
 bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.1.1.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı durumlu bağımsız
 simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.2.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.1.2.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı durumlu bağımlı
 simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.3.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.1.3.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımlı durumlu
 simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.1.1/6
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.2.1.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.2.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımlı durumlu

bağımsız simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.2.1/6
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.2.2.1/3-4

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.2.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımlı durumlu
 bağımlı simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.3.1.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.3.1.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.3.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bir bağımsız durumlu
 simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.1.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.4.1.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.4.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bir bağımsız durumlu
 bağımsız simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.2.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.4.2.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.4.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bir bağımsız durumlu
 bağımlı simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.3.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.4.3.1/3-4
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.6.4.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bağımsız durumlu
 simetrinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.1.1/4-5
 toplam düzgün simetrik olasılık,
 2.3.1.2.6.6.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.2.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.1.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.2.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun

bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.1.1.1/7-8

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.2.1/7

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.1.3.1/7-8

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.2.1.1/12

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.2.2.1/12

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.2.3.1/8

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.1.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bir bağımsız durumlu
 bağımsız simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.2.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bir bağımsız durumlu
 bağımlı simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.3.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bağımsız durumlu
 simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.4.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.4.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bağımsız durumlu
 bağımsız simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.6.2.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.6.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bağımsız durumlu
 bağımlı simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.6.3.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.6.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımsız durumlu
 simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.1.1/12

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.7.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımsız durumlu
 bağımsız simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.2.1/12
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.7.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımsız durumlu
 bağımlı simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.3.1/8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.7.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bağımsız durumlu
 simetrisinin ilk herhangi bir ve son durumunun
 bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.1.1/5
 toplam düzgün simetrik olasılık,
 2.3.1.2.7.1.1.1/3-4

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.7.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı durumlu bağımsız
 simetrisinin ilk herhangi iki ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.2.1/5
 toplam düzgün simetrik olasılık,
 2.3.1.2.7.1.2.1/3-4

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.7.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı durumlu bağımlı
 simetrisinin ilk herhangi iki ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.3.1/5
 toplam düzgün simetrik olasılık,
 2.3.1.2.7.1.3.1/3-4

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.7.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımlı durumlu
 simetrisinin ilk herhangi iki ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.2.1.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.2.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.2.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.2.2.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.2.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.2.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.2.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.2.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumda
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.4.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.4.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.4.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.4.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.4.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.4.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.4.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.4.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.4.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.6.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.6.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.6.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.6.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.6.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.6.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.6.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.6.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.6.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.7.1.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.7.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.7.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.7.2.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.7.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.7.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.7.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.7.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.7.3.1/8

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

simetrik olasılık,
2.3.1.1.10.1.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.1.1/13

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

simetrik olasılık,
2.3.1.1.10.1.2.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.2.1/13

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

simetrik olasılık,
2.3.1.1.10.1.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.2.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.1.1/23

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

simetrik olasılık,
2.3.1.1.10.2.2.1/22

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.2.1/23

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

simetrik olasılık,
2.3.1.1.10.2.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.4.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.4.2.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.4.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.3.1/23

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

simetrik olasılık,
2.3.1.1.10.6.1.1/12-13

toplam düzgün olmayan simetrik olasılık,
2.3.1.3.10.6.1.1/23

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

simetrik olasılık,
2.3.1.1.10.6.2.1/12-13
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.6.2.1/23

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

simetrik olasılık,
2.3.1.1.10.6.3.1/12-13
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.6.3.1/23

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

simetrik olasılık,
2.3.1.1.10.7.1.1/22
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.7.1.1/23

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

simetrik olasılık,
2.3.1.1.10.7.2.1/22
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.7.2.1/23

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

simetrik olasılık,
2.3.1.1.10.7.3.1/12-13
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.7.3.1/13

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

simetrik olasılık,
2.3.1.1.11.1.1.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.1.1.1/17

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

simetrik olasılık,
2.3.1.1.11.1.2.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.1.2.1/17

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

simetrik olasılık,
2.3.1.1.11.1.3.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.1.3.1/17

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

simetrik olasılık,
2.3.1.1.11.2.1.1/29
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.2.1.1/30

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

simetrik olasılık,
2.3.1.1.11.2.2.1/29
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.2.2.1/30

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

simetrik olasılık,
2.3.1.1.11.2.3.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.2.3.1/17

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

simetrik olasılık,
2.3.1.1.11.4.1/16

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.4.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.4.2.1/16

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.4.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.4.3.1/16

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.4.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.1.1/16

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.6.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.2.1/16

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.6.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.3.1/16

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.6.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.7.1.1/29

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.7.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.7.2.1/29

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.7.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
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simetrik olasılık,
2.3.1.1.11.7.3.1/16

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.7.3.1/17

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 dağılımlarında, simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler de ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesi için dış kaynak kullanılmamıştır.