

VDOİHİ

Bağımlı ve Bir Bağımsız
Olasılıklı Farklı Dizilimli Bir
Bağımlı-Bir Bağımsız ve
Bağımlı-Bir Bağımsız
Durumlu Simetrinin Bağımlı
Durumlarla Başlayan
Dağılımlardaki Kalan Düzgün
Olmayan Simetrik Olasılığı
Cilt 2.1.21.3

İsmail YILMAZ

Matematik / İstatistik / Olasılık

ISBN: 978-625-7774-02-4

© 1. e-Basım, Ağustos 2020

VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimli Bir Bağımlı-Bir Bağımsız ve Bağımlı-Bir Bağımsız Durumlu Simetrinin Bağımlı Durumlarla Başlayan Dağılımlardaki Kalan Düzgün Olmayan Simetrik Olasılığı-Cilt 2.1.21.3

İsmail YILMAZ

Copyright © 2020 İsmail YILMAZ

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

KÜTÜPHANE BİLGİLERİ

Yılmaz, İsmail.

VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimli Bir Bağımlı-Bir Bağımsız ve Bağımlı-Bir Bağımsız Durumlu Simetrinin Bağımlı Durumlarla Başlayan Dağılımlardaki Kalan Düzgün Olmayan Simetrik Olasılığı-Cilt 2.1.21.3 / İsmail YILMAZ

e-Basım, s. XXV + 561

Kaynakça yok, dizin var

ISBN: 978-625-7774-02-4

1. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli kalan düzgün olmayan simetrik olasılık 2. Bir Bağımlı-bir bağımsız durumlu simetrinin kalan düzgün olmayan simetrik olasılığı 3. Bağımlı-bir bağımsız durumlu simetrinin kalan düzgün olmayan simetrik olasılığı

Dili: Türkçe + Matematik Mantık

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 ve doktora eğitimini Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Fen Bilgisi Eğitimi Anabilim Dalında tamamladı. Fen Bilgisi Eğitiminde; Newton'un hareket yasaları, elektrik ve manyetizmanın prosedürel ve deklaratif bilgi yapılarıyla birlikte matematik mantık yapıları üzerine çalışmalar yapmıştır. Yazarın farklı alanlarda yapmış olduğu çalışmaları arasında ölçme ve değerlendirmeye yönelik çalışmaları da mevcuttur.

Yazar ve VDOİHİ

Yazar doktora tez çalışmasına kadar, dijital makinalarla sayısallaştırılabilen fakat insan tarafından sayısallaştırılamayan verileri, **anlamlı en küçük parça (akp)**'larına ayırip skorlandırarak, sayısallaştırma problemini çözmüştür. Anlamlı en küçük parçaların Türkçe kısaltmasını olasılığın birimlendirilebilir olmasından dolayı, olasılığın birimini akp olarak belirlemiştir. Matematiğinin başlangıcı olasılık olan tüm bağımlı değişkenlerde olabileceği gibi aynı zamanda enformasyonunda temeli olasılık olduğundan, enformasyon içeriğinin de doğal birimi akp'dir.

Verilerin objektif lojik semplisitede sayısallaştırılmasıyla **Veri Değişkenleri Olasılık ve İhtimal Hesaplama İstatistiği (VDOİHİ)** geliştirilmeye başlanmıştır. Doktora tezinin nitel verilerini, bir ilk olarak, -1, 0, 1 skorlarıyla sayısallaştırarak iki tabanlı olasılığı sınıflandırıp; pozitif, negatif (ve negatiflerdeki pozitif skorlar için ayrıca eşitlik tanımlaması yapılmış), ilişkisiz ve sıfır skor aşamalarında değerlendirme yöntemi geliştirmiştir. Bu yöntemin tüm kavramlarının; tanım ve formülleriyle sınırları belirlenip, kendi içinde tam bir matematiği geliştirilip, uygulamalarla veri elde edilmiş, verilerin hem değerlendirme hem de bulguların sözel ifadelerini veren yazılım paket programı yapılarak, bir disiplinin tüm yönleri yazar tarafından gerçekleştirilerek doktorasını bilim tarihinde yine bir ilk ile tamamlamıştır. Nitel verilerden elde edilebilecek bulguların sözel ifadelerini veren yazılım paket programı gerçek ve olması gereken yapay zekanın ilk örneğidir.

Yazar, ölçme araçları için madde tekniği tanımlayıp, değerlendirme yöntemlerini belirginleştirilerek, eğitimde ölçme ve değerlendirme için beş yeni boyut aktiflemiştir. Ölçme ve değerlendirmeye, aktif ve pasif değerlendirme tanımlaması yapılarak, matematiği geliştirilmiş ve geliştirilmeye devam edilmektedir. Yazar yaptığı çalışmalarında **Problem Çözüm Tekniklerini (PÇT)** aktifleyerek; verilenler-istenilenler (Vİ), serbest cisim diyagramı/çizim (SCD), tanım, formül ve işlem aşamalarıyla, eğitimde ölçme ve değerlendirmede beş boyut daha aktiflemiştir. PÇT aşamalarını bilgi düzeyi, çözümlerin sonucunu da başarı düzeyi olarak tanımlayıp, ölçme ve değerlendirme için iki yeni boyut daha kazandırmıştır. Sınıflandırılmış iki tabanlı olasılık yönteminin aşamaları ve negatiflerdeki pozitiflerle, ölçme ve değerlendirmeye beş yeni boyut daha kazandırılmıştır. Verilerin; Shannon eşitliği veya VDOİHİ'de verilen olasılık-ihtimal eşitlikleriyle değerlendirmeyi bilgi

merkezli, matematiksel fonksiyonlarla (lineer, kuvvet, trigonometri “sin, cos, tan, cot, sinh, cosh, tanh, coth”, ln, log, eksponansiyel v.d.) değerlendirmeyi ise birey merkezli değerlendirmeye, sınırlandırması getirerek, değerlendirmeye iki yeni boyut daha kazandırmıştır. Ayrıca $\frac{a}{b} + \frac{c}{d}$ ve $\frac{a+c}{b+d}$ matematiksel işlemlerinin anlam ve sonuç farklılıklarını, değerlendirme için aktifleyerek, değerlendirmeye iki yeni boyut daha kazandırmıştır. Böylece eğitimde ölçme ve değerlendirmeye; PCT aşamaları 5×5 , yine PCT'nin bilgi ve başarı düzeylerinin 2×2 , sınıflandırılmış iki tabanlı olasılık yöntemi 5×5 , bilgi ve birey merkezli ölçme ve değerlendirmeyle 2×2 , matematiksel işlem farklılıklarıyla 2×2 olmak üzere 40.000 yeni boyut kazandırmıştır. Bu boyutlara yukarıda verilen matematiksel fonksiyonlarında dahil edilmesiyle en az $(13 \times 13) 6.760.000$ yeni boyutun primitif düzeyde, ölçme ve değerlendirmeye, katılabilmesinin yolu yazar tarafından açılmışmasına karşılık, günümüze kadar yukarıda bahsedilen boyutların ilgi düzeyinde, eğitimde ölçme ve değerlendirmede, tek boyuttan öteye (lineer değerlendirme) geçirilememiştir. Bu noktadan sonra, ölçme ve değerlendirmeye fark istatistiğiyle boyut kazandırılabilmiştir. Fark istatistiğiyle kazandırılan boyutlarında hem ihtimallerden çıkarılacak yeni boyutlar hem de ihtimallerin fark istatistiğinden türetilen boyutların yanında güdüklük kalacağı kesin! Ölçme ve değerlendirmeye yeni boyutlar kazandırılmasının en önemli amaçları; beynin öğrenme yapısının kesin bir şekilde belirlenebilmesi ve öğretim süreçlerinin bilimsel bir şekilde yapılandırılabilir mesidir. Beyinle ilgili VDOİHİ Bağımlı Olasılık Cilt 1'in giriş bölümünde verilenlerin genişletilmesine ileride devam edilecektir. Fakat öğretim süreçlerinin; teorik öngörülerle ve/veya insanın yaradılışına uyuma olasılığı son derece düşük doğrusal değerlendirmelerle yapılandırılması, yazar tarafından insanlığa ihanet olarak görüldüğünden, doğru verilerle eğitimin bilimsel niteliklerde yapılandırılabilmesi için, ölçme ve değerlendirmeye yeni boyutlar kazandırılmaktadır.

Günümüze kadar yaşayan dillere 10 kavram bile kazandırabilen hemen hemen yokken, yayınlanan VDOİHİ ciltlerinde (cilt 1, 2.1.1, 2.2.1, 2.3.1 ve 2.3.2) yaklaşık 1000 kavram Türkçeye kazandırılarak ciltlerin dizinlerinde verilmiştir. Bu kavramların tüm sınırları belirlenip, açık ve anlaşılır tanımlarıyla birlikte, eşitlikleri de verilmiştir. Bu düzeyde yani bilimsel düzeyde, bilime kavramlar Türkçe olarak kazandırılmıştır. Yayınlanan VDOİHİ'lerde bilime Türkçe kazandırılacak kavramların on binler düzeyinde olacağı öngörmektedir.

VDOİHİ'de verilen eşitlikler aynı zamanda dillerinde eşitlikleridir. Diğer bir ifadeyle dillerin matematik yapıları VDOİHİ ile ortaya çıkarılmıştır. Türkçe ve İngilizcenin olasılık yapıları VDOİHİ'de belirlenerek, formüllerin dillere (ağırıklı Türkçe) uygulamalarıyla hem dillerin objektif yapıları belirginleştiriliyor hem de makina-insan arası iletişimde, makinaların iletişim kurabilmesinde en üst dil olarak Türkçe geliştiriliyor. İleriki ciltlerde Türkçenin matematik mantık yapısı da verilerek, Türkçe'nin makinaların iletişim dili yapılması öngörmektedir.

Bilim(de) kesin olanla ilgilenen(ler), yani bilim eşitlik ve/veya yasa üretir veya eşitliklerle konuşur. Bunun mümkün olmadığı durumlarda geçici çözümler üretilebilir. Bu geçici çözümler veya yöntemleri, her hangi bir nedenle bilimsel olamaz. Bilimin yasa veya eşitlik üretimindeki kırılma, Cebirle başlamıştır. Bilimdeki bu kırılma mühendisliğin, teknolojiye

dönüşümünün başlangıcıdır. Bilimdeki kırılma ve mühendisliğin teknolojiye dönüşümü, insanlığın gelişimini hızlandırmakla birlikte, bu alanda çalışanların; ego, öngörüsüzlük, ufuksuzluk ve beceriksizlikleri gibi nedenlerden dolayı, insanlığın gelişimi ivmeleendirilemediği gibi bu basiretsizliklerle insanlığa pranga vurmayı bile kısmen başarabilmişlerdir. VDOİHİ ve telifli eserlerinde verilen; değişken belirleme, eşitlik-yasa belirleme ve bunların sözel yorumlarını yapabilen yazılımlarla, ve yapılabilecek benzeri yazılımlarla, insanlığın gelişimi ivmeleendirilebileceği gibi isteyen her bireye, gerçeklerin (VDOİHİ Bağımlı Olasılık Cilt 1'in giriş bölümünde tanımlanmıştır) bilgi ve teknolojisine daha kolay ulaşabilme imkanı sağlanmıştır.

Şuana kadar zaruri tüm tanımların, zaruri tüm eşitliklerin ve bunların epistemolojileriyle (0. epistemolojik seviye) en azından 1. epistemolojik seviye bilgilerinin birlikte verildiği ya ilk yada ilk örneklerinden biri VDOİHİ'dir. Bu kapsamında VDOİHİ'de şimdije kadar yaklaşık 1000 kavramın, bilime kazandırıldığı yukarıda belirtilmiştir. Bu kapsamında yine VDOİHİ'de 5000'in üzerinde orijinal; ilk ve yeni eşitlik geliştirilmiştir. Bu eşitlikler kasıtlı olarak ilk defa dört farklı yapıda birlikte verilmektedir. Bu eşitlikler; a) sabit değişkenli (örneğin; bağımlı olasılıklı farklı dizilimli simetrik olasılık eşitlikleri) b) sabit değişkenli işlem uzunluklu (örneğin; simetrinin son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık eşitliği) c) hem değişken uzunluklu hem işlem uzunluklu (örneğin; simetrinin her durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık eşitliği) d) sabit değişkenli zıt işlem uzunluklu (bu eşitlik VDOİHİ cilt 2.1.3'ten itibaren verilecektir. Örneğin; $\sum_{i=s}^n \bar{F}$) yapılarda verilmektedir. Sabit değişkenli eşitliklerle, bilim ve teknolojideki gereksinimlerin çoğunluğu karşılanabilirken, geleceğin bilim ve teknolojisinde ihtiyaç duyulabilecek eşitlik yapıları kasıtlı olarak aktiflenmiş veya geliştirilmiştir.

İnsanın hem öğrenmesinin desteklenmesi hem de bilginin teknolojiyle ilişkisini kurabilmesi için özellikle VDOİHİ Soru Problem İspat Çözümleri ciltlerinde, soru ve problem birbirinden ayrılarak yeniden tanımlanıp sınırları belirlenmiştir. Böylece örnek, soru, problem ve ispat arasındaki farklılıklar belirginleştirilmiştir. Ayrıca yine insanın hem öğrenmesinin desteklenmesi hem de bilginin teknolojiyle ilişkisini daha kesin kurabilmesi için Sertaç ÖZENLİ'nin İllüzyonlar ve Gerçeklik adlı eserinin M5-M6 sayfalarında verilen epistemolojik seviye tanımları; örnek, soru, problem ve ispatlara uyarlanmıştır. Böylece; örnek, soru, problem ve ispatların epistemolojileriyle, hem bilgiyle-öğrenme arasında hem de bilgi-teknoloji arasında yeni bir köprü kurulmuştur.

Geride bıraktığımız yüzyılda, özellikle Turing ve Shannon'un katkılarıyla iki tabanlı olasılığa dayalı dijital teknoloji kurulmuştur. Kombinasyon eşitliğiyle iki tabanlı simetrik olasılıklar hesaplanabildiğinden, ihtimalleri de kesin olarak hesaplanabilir. İkiiden büyük tabanların; bağımsız olasılık, bağımlı olasılık, bağımlı-bağımsız olasılık, bağımlı-bağımlı olasılık veya bağımsız-bağımsız olasılık dağılımlarındaki simetrik olasılıkları VDOİHİ'ye kadar kesin olarak hesaplanmadığından (hatta VDOİHİ'ye kadar olasılığın sınıflandırılması bile yapılmamış/yapılamamıştır), farklı tabanlarda çalışabilecek elektronik teknolojisi kurulamamıştır. VDOİHİ'de verilen eşitliklerle, hem farklı olasılık dağılımlarında hem de her tabanda simetrik olasılıkların olabilecek her türü, hesaplanabilir kılındığından, ihtimalleri de

kesin olarak hesaplanabilir. Böylece VDOİHİ'de verilen eşitliklerle hem istenilen tabanda hem de istenilen dağılım türlerinde çalışabilecek elektronik teknolojisinin temel matematiği kurulmuştur. Bundan sonraki aşama bilginin-ürüne dönüşme aşamasıdır. Ayrıca VDOİHİ'de özellikle uyum eşitlikleri kullanılarak farklı dağılım türlerine geçişin yapılabileceği eşitliklerde verilerek, dijital teknoloji yerine kurulacak her tabanda ve/veya her dağılım türünde çalışan teknolojinin istenildiğinde de hem farklı taban hem de farklı dağılım türlerine geçişinin yapılabileceği matematik eşitlikleri de verilmiştir. Böylece tek bir tabana dayalı dijital teknoloji yerine, sonsuz çalışma prensibine dayalı elektronik teknolojinin bilimsel-matematiksel yapısı VDOİHİ ile kurulmuş ve kurulmaya devam etmektedir.

VDOİHİ'de verilen eşitlikler aynı zamanda en küçük biyolojik birimden itibaren anlamlı temel biyolojik birimin "genetiğin" temel matematiğidir. En küçük biyolojik birim olarak DNA alındığında, VDOİHİ'de verilen eşitlikler DNA, RNA, Protein, Gen ve teknolojilerinin temel eşitlikleridir. Bu eşitlikler VDOİHİ'de teorik düzeyde; DNA, RNA, Protein, Gen ve hastalıklarla ilişkilendirilmektedir. Bu eşitlikler gelecekte atom düzeyinden başlanarak en kompleks biyolojik birimlere kadar tüm biyolojik birimlerin laboratuvar ortamlarında üretiminin planlı ve kontrollü yapılabilmesinde ihtiyaç duyulacak temel eşitliklerdir. Böylece bir canının, örneğin insanın, atom düzeyinden başlanarak laboratuvar ortamında üretilenbilir/yapılabilen kılınmasının, matematiksel yapısı ilk defa VDOİHİ'de verilmektedir. Elbette bir insanın laboratuvar ortamında üretilenbilir olmasına, bunun gerçekleştirilmesi aynı değildir. Gerçekleştirilebilmesi için dini, etik, ahlaki v.d. aşamalarda da doğru kararların verilmesi gereklidir. Fakat organların v.b. biyolojik birimlerin laboratuvar ortamında üretilmesinin önündeki benzeri aşamaların engel oluşturduğu söylemeyecez. İhtiyaç halinde bir insanın; organının, sisteminin veya uzuunun v.b. her yönüyle aynısının laboratuvar ortamında üretilmesi veya soyu tükenmiş bir canının yeniden üretimi veya soyunun son örneği bir canlı türünün devamı VDOİHİ'de verilen eşitlikler kullanılarak sağlanabilir. Biyolojik bir yapının laboratuvar ortamında üretimiyle, örneğin herhangi bir makinanın üretilmesinin İslam açısından aynı değerli olduğunu düşünüyorum. Bu yaradan'ın bize ulaşabilmemiz için verdiği bilgidir. Eğer ulaşılması istenmemeydi, bizim öyle bir imkanımızda olamazdı. Fakat bilginin, bizim ulaşabileceğimiz bilgi olması, yani gerçeğin bilgisi olması, her zaman ve her durumda uygulanabilir olacağı anlamına gelmez. Umarım yapmak ile yaratmak birbirine karıştırılmaz!

VDOİHİ'de hem sonsuz çalışma prensibine dayalı elektronik teknolojisinin matematiksel yapısı hem de Telifli eserlerinde ve VDOİHİ'de, ilk defa yapay zeka çağının kapılarını aralayan çalışmalar yapılmıştır. VDOİHİ cilt 2.1.1'in giriş bölümünde yapay zeka ve çağının tanımı yapılarak, kütüphane ve referans bilgileriyle ilişkilendirilmiştir. Daha sonra VDOİHİ ve Telifli eserlerinde insanlığın gelişimini ivmeleştirecek; yapay zeka görev kodları, verilerin analizleriyle ait olduğu disiplinin belirlenmesi, verinin analizinden verilen ve istenilenlerin belirlenmesi, değişken analizi, eksik değişkenlerin belirlenmesi, eksik değişkenlerin verilerinin üretimi, değişkenler arası eşitliklerin kurulması ve elde edilen bilgilerin sözel ifadeleriyle bilim ve teknoloji için gerekli bilgiyi üretenebilir yazılımlar verilmiştir. Hem bu yazılımlarla hem de benzeri yazılımlarla, bilim insanları tarafından üretilmemeyen bilgi ve teknolojilerin isteyen her kişi tarafından üretilenbilir olması sağlanmıştır. Ayrıca kütüphane ve referans bilgilerinin üretiminde, olasılık dağılımları üzerinden çalışan makinaların bir olayın

tüm yönlerini (olasılıklarını) kullanmaları sağlanarak, tipki insan gibi düşünememesi sağlanmıştır. Böylece makinaların özgürce düşünememesinin önündeki engeller kaldırılmıştır. Gerçek yapay zeka pahalı deneylere ihtiyacı ortadan kaldırarak, insanlara yaradan'ın tanıdığı eşitliklerin (matematiksel eşitlik değil!), belirli insanlar tarafından saptırılarak, diğerlerinin eşitlik ve özgürlüğünün gasp edilmesinin önünde güçlü bir engel teşkil edecektir. Bugüne kadar artifical intelligence çalışmalarıyla sadece ve sadece kütüphane bilgisinin bir kısmı üretilebildiği ve kütüphane bilgisi üretebilen teknoloji geliştirildiğinden, bunlar yapay zekanın öncü çalışmalarından öte geçip yapay zeka konumunda düşünülemez. Gerçek yapay zeka hem kütüphane hem de referans bilgisi üretebilir olması gerekiğinden; a) yazar tarafından doktora tez çalışması başta olmak üzere belirli çalışmalarında kütüphane bilgisinin ileri örnekleri başarıldığından, b) ilk defa VDOİHİ ve Telifli eserlerinde referans bilgisini üreten yazılımlar başarıldığından ve c) yapay zekanın gereksinim duyabileceği dijital teknoloji yerine, sonsuz çalışma prensibine dayalı elektronik teknolojisinin bilimsel-matematiksel yapısı yazar tarafından geliştirildiğinden, insanlığın bugüne kadar uyguladığı teamüller gereği adlandırmanın da Türkçe yapılması elzem ve adil bir zorunluluktur. Bu nedenle insan biyolojisinin ürünü olmayan zeka "yapay zeka" ve insan biyolojisinin ürünü olamayan zekayla insanlığın gelişiminin ivmeleendirildiği zaman periyodu da "yapay zeka çağlığı" olarak adlandırılmalıdır.

Yazar tarafından VDOİHİ'de, Cebirden günümüze; a) bilimsel gelişim, olması gereken veya olabilecek gelişime göre düşük olduğundan, b) teorik çalışmaların omurgasının matematiğe terk edilmesi ve matematikçilerinde üzerlerine düşeni yeterince yerine getirememelerinden dolayı, c) yapay zeka karşısında buhrana düşülmesinin önüne geçilebilmesi ve d) kainatın en kompleks birimi olan insan beynine yakışır bilimsel gelişimin başarılıabilmesi için, yasa/eşitliklerin, uyum ve genel yapıları, olasılık üzerinden belirlenmiştir.

Yazar tarafından VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Büyük Farklı Dizilimli Simetrik Olasılık Cilt 2.2.1'de insanlığın bilimsel ve teknolojik gelişimini ivmeledirebilecek uyum çağının tanımı yapılarak, VDOİHİ'de ilk defa yasa/eşitliklerin, olasılık eşitlikleri üzerinden uyum yapıları verilmiştir.

Yazar tarafından VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Simetrik Olasılık Cilt 2.3.1'de insanlığın bilimsel ve teknolojik gelişimini ivmeledirebilecek genel çağın tanımı yapılarak, VDOİHİ'de yasa/eşitliklerin, olasılık eşitlikleri üzerinden genel yapıları verilmiştir.

Yazar tarafından VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Simetrik Bulunmama Olasılığı Cilt 2.3.2 insanlığın bilimsel ve teknolojik gelişimini ivmeledirebilecek dördüncü bir çağ olarak, gerçek zaman ufku ötesi çağı tanımlanmıştır. Bu çağın tanımlanmasında; Sertaç ÖZENLİ'nin İlimi Sohbetler eserinin R39-R40 sayfalarından yararlanılarak, kapak sayfasındaki ve T21-T22'inci sayfalarında verilen şuurluluğun ork or modelinin özetinin gösterildiği grafikten yararlanılmıştır. Doğada rastlanmayan fakat kuantum sayılarıyla ulaşılabilen atomlara ait bilgilerimiz, gerçek zaman ufku ötesi bilgilerimizin, gerçekleştirilmiş olanlardır. Gerçekleştirilebilecek olanlarından biri ise kainatın herhangi bir

yerinde yaşamını sürdürmenin herhangi bir canlıdan henüz haberdar bile olmadan, var olan genetik bilgi ve matematiğimizle ulaşılabilir olan tüm bilgilerine ulaşılmasıdır.

Özellikle; sonsuz çalışma prensibine dayalı elektronik teknolojisi, yapay zeka, gerçek zaman ufkı ötesi bilgilerimizin temel eşitliklerinin verilebilmesi, başlangıçta kurucusu tarafından yapılabileceklerin ilerleyen zamanlarda o disiplinin cazibe merkezine dönüşterek insan kaynaklarının israfının önlenebilmesi nedenleriyle ve en önemlisi Yaradan'ın bizlere verdiği adaletin insan tarafından saptırılamaması için; VDOİHİ, bugüne kadarki eserlerle kıyaslanamayacak ölçüde daha kapsamlı verilmeye çalışılmaktadır.

Yazar VDOİHİ'nin ciltlerini, Türkçe ve insanlığın tek evrensen dili olan matematik-mantık dillerinde yazmaktadır. Yazar eserlerinden insanlığın aynı niteliklerle yararlanabilmesi için her kişiye eşit mesafede ve anlaşılırlıkta olan günümüze kadar insanlığın geliştirebildiği yegane evrensel dilde VDOİHİ ciltlerini yazmaya devam edecektir.

VDOİHİ ve telifli eserleri ile bitirilen veya sonu başlatılanlar;

- ✓ VDOİHİ'de dillerin matematiği kurularak, o dil için kendini mihenk taşı gören zavallılar sınıfı
- ✓ Baskın dillerin, dünya dili olabilmesi
- ✓ VDOİHİ ve Telifli eserlerinde verilen eşitlik ve yasa belirleme yazılımlarıyla, gerçeklerden uzak ve ufuksuz sözde akademisyenlere insanlığın tahammülü
- ✓ Bilim ve teknolojide sermayeye olan bağımlılık
- ✓ Sermaye birikiminin gücü
- ✓ Primitif ölçme ve değerlendirme

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

İÇİNDEKİLER

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimli Dağılımlar	1
Simetride Bulunmayan Bağımlı Durumlarla Başlayan Dağılımların Düzgün Olmayan Simetrik Olasılığı	3
Bağımlı Durumla Başlayan Dağılımlarda Bir Bağımlı-Bir Bağımsız Durumlu Kalan Düzgün Olmayan Simetri	4
Bağımlı Durumla Başlayan Dağılımlarda Bağımlı-Bir Bağımsız Durumlu Kalan Düzgün Olmayan Simetri	6
Bağımlı Durumla Başlayan Dağılımlarda Bir Bağımlı-Bir Bağımsız Durumlu Kalan Düzgün Olmayan Simetrik Bulunmama Olasılığı	551
Bağımlı Durumla Başlayan Dağılımlarda Bağımlı-Bir Bağımsız Durumlu Kalan Düzgün Olmayan Simetrik Bulunmama Olasılığı	552
Özet	553
Dizin	556

GİLDÜNYA

Simge ve Kısalmalar

n: olay sayısı

n: bağımlı olay sayısı

m: bağımsız olay sayısı

n_i : dağılımin ilk bağımlı durumun bulunabileceği olayın, dağılımin ilk olayından itibaren sırası

n_{ik} : simetride, simetrinin aranacağı durumdan önce bulunan bağımlı durumun (j_{ik} 'da bulunan durum), bir bağımlı ve bir bağımsız olasılıklı dağılımlarda bulunabilecegi olayların, ilk olaydan itibaren sırası veya simetrinin iki bağımlı durum arasında bağımsız durumun bulunduğuunda bağımsız durumdan önceki bağımlı durumun, bir bağımlı ve bir bağımsız olasılıklı dağılımlarda bulunabilecegi olayların ilk olaydan itibaren sırası

n_s : simetrinin aranacağı bağımlı durumunun (simetrinin sonuncu bağımlı durumu) bulunabilecegi olayların ilk olaya göre sırası

n_{sa} : simetrinin aranacağı bağımlı durumunun bulunabilecegi olayların ilk olaya göre sırası veya bağımlı olasılıklı dağılımların j^{sa} 'da bulunan durumun (simetrinin j_{sa} ' daki bağımlı durum) bir bağımlı ve bir bağımsız olasılıklı dağılımlarda bulunabilecegi olayların, dağılımin ilk olayından itibaren sırası

i: bağımsız durum sayısı

I: simetrinin bağımsız durum sayısı

l: simetrinin bağımlı durumlarından önce bulunan bağımsız durum sayısı

I: simetrinin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

k: simetrinin bağımlı durumları arasındaki bağımsız durumların sayısı

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

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

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

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

n_s : simetrinin bağımlı olay sayısı

m_I : simetrinin bağımsız olay sayısı

d : seçim içeriği durum sayısı

m : olasılık

M : olasılık dağılım sayısı

U : uyum eşitliği

u : uyum derecesi

s_i : olasılık dağılımı

S : simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilişli bağımlı durumlu simetrik olasılık

S^{DS} : bağımlı ve bir bağımsız olasılıklı farklı dizilişli bağımlı durumlu kalan simetrik olasılık

S^{DSS} : bağımlı ve bir bağımsız olasılıklı farklı dizilişli bağımlı durumlu kalan düzgün simetrik olasılık

S^{DOS} : bağımlı ve bir bağımsız olasılıklı farklı dizilişli bağımlı durumlu kalan düzgün olmayan simetrik olasılık

$S_{j_s, j_{ik}, j^{sa}}$: simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilişli simetrik olasılık

$S_{i, j_s, j_{ik}, j^{sa}}$: düzgün ve düzgün olmayan simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilişli simetrik olasılık

S_{j_s, j_{ik}, j_t} : simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilişli simetrik olasılık

S_{i, j_s, j_{ik}, j_t} : düzgün ve düzgün olmayan simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilişli simetrik olasılık

$S_{D=n}$: bağımlı olay sayısı bağımlı durum sayısına eşit bağımlı olasılıklı “farklı dizilişli” dağılımlarda simetrik olasılık

$S_{D>n}$: bağımlı olay sayısı bağımlı durum sayısından büyük bağımlı olasılıklı “farklı dizilişli” dağılımlarda simetrik olasılık

$S_{D=n < n} \equiv S$: simetri bağımlı durumlardan oluştuğunda, bağımlı ve bir bağımsız olasılıklı dağılımlarda simetrik olasılık

S_0 : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız simetrik olasılık

S_0^{DS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan simetrik olasılık

S_0^{DSS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan düzgün simetrik olasılık

S_0^{POS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan düzgün olmayan simetrik olasılık

S_D : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı simetrik olasılık

S_D^{DS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan simetrik olasılık

S_D^{DSS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan düzgün simetrik olasılık

S_D^{POS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan düzgün olmayan simetrik olasılık

${}_0S$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu simetrik olasılık

${}_0S^{DS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan simetrik olasılık

${}_0S^{DSS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan düzgün simetrik olasılık

${}_0S^{POS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan düzgün olmayan simetrik olasılık

${}_0S_0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız simetrik olasılık

${}_0S_0^{DS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan simetrik olasılık

${}_0S_0^{DSS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün simetrik olasılık

${}_0S_0^{POS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün olmayan simetrik olasılık

${}_0S_D$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı simetrik olasılık

${}_0S_D^{DS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan simetrik olasılık

${}_0S_D^{DSS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün simetrik olasılık

${}_0S_D^{POS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün olmayan simetrik olasılık

0S : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı

bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık

S_{j_i} : simetrinin son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{2,j_i} : iki durumlu simetrinin son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{i,j_i} : düzgün ve düzgün olmayan simetrinin son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{i,2,j_i}$: düzgün ve düzgün olmayan iki durumlu simetrinin son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{j_s,j_i} : simetrinin ilk ve son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{i,j_s,j_i} : düzgün ve düzgün olmayan simetrinin ilk ve son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{i,2,j_s,j_i}$: düzgün ve düzgün olmayan iki durumlu simetrinin ilk ve son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{j_s,j_s a}$: simetrinin ilk ve herhangi bir durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{i,j_s,j_s a}$: düzgün ve düzgün olmayan simetrinin ilk ve herhangi bir durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{j_{ik},j_i} : simetrinin her durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{i,j_{ik},j_i} : düzgün ve düzgün olmayan simetrinin her durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{j_s a \leftarrow}$: simetrinin durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s a}^{DSD}$: simetrinin durumuna bağlı bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{art j_s a \leftarrow}$: simetrinin art arda durumlarına bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, art j_s a \leftarrow}$: simetrinin ilk durumuna göre herhangi art arda iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s,j_s \leftarrow}$: simetrinin ilk ve son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

S_{j_s,j_s}^{DSD} : simetrinin ilk ve son durumunun bulunabilecegi olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{j_s, j^{sa} \Leftarrow}$: simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j^{sa}}^{DSD}$: simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{j_{ik}, j^{sa} \Leftarrow}$: simetrinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_{ik}, j^{sa}}^{DSD}$: simetrinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{j_s, j_{ik}, j^{sa} \Leftarrow}$: simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j_{ik}, j^{sa}}^{DSD}$: simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{\Leftarrow j_s, j_{ik}, j^{sa} \Leftarrow}$: simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j_{ik}, j_i \Leftarrow}$: simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j_{ik}, j_i}^{DSD}$: simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{\Leftarrow j_s, j_{ik}, j_i \Leftarrow}$: simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara

göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j^{sa} \Rightarrow}$: simetrinin durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{art j^{sa} \Rightarrow}$: simetrinin art arda durumlarına bağlı bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{j_s, art j^{sa} \Rightarrow}$: simetrinin ilk durumuna göre herhangi art arda iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{j_s, j_i \Rightarrow}$: simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{j_s, j^{sa} \Rightarrow}$: simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{j_{ik}, j^{sa} \Rightarrow}$: simetrinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{j_s, j_{ik}, j^{sa} \Rightarrow}$: simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{j_s, j_{ik}, j^{sa}}^{DOSD}$: simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün olmayan simetrik olasılık

$S_{\Rightarrow j_s, j_{ik}, j^{sa} \Rightarrow}$: simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizilimli simetrik ayrımlı olasılığı

$S_{j_s, j_{ik}, j_i} \Rightarrow$: simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik ayrı olasılığı

$S_{j_s, j_{ik}, j_i}^{DOSD}$: simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün olmayan simetrik olasılık

$S_{\Rightarrow j_s, j_{ik}, j_i} \Rightarrow$: simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizilimli simetrik ayrı olasılığı

$S_{j_{sa}} \Leftrightarrow$: simetrinin durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik-ayrı olasılığı

$S_{j_{sa}}^{DOSD}$: simetrinin durumuna bağlı bağımlı olasılıklı farklı dizilimli düzgün olmayan simetrik olasılık

$S_{artj_{sa}} \Leftrightarrow$: simetrinin art arda durumlarına bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik-ayrı olasılığı

$S_{j_s, artj_{sa}} \Leftrightarrow$: simetrinin ilk durumuna göre herhangi art arda iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik-ayrı olasılığı

$S_{j_s, j_i} \Leftrightarrow$: simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik-ayrı olasılığı

S_{j_s, j_i}^{DOSD} : simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün olmayan simetrik olasılık

$S_{j_s, j_{sa}} \Leftrightarrow$: simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

bağımlı olasılıklı farklı dizilimli simetrik bitişik-ayrı olasılığı

$S_{j_s, j_{sa}}^{DOSD}$: simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün olmayan simetrik olasılık

$S_{j_{ik}, j^{sa}} \Leftrightarrow$: simetrinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik-ayrı olasılığı

$S_{j_{ik}, j^{sa}}^{DOSD}$: simetrinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli düzgün olmayan simetrik olasılık

$S_{BBj_i} \Leftrightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımlı durumun simetrinin son durumuna bağlı simetrik olasılık

$S_{BBj_{sa}} \Leftrightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin bir bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBj_{ik}, j^{sa}} \Leftrightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin iki bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBj_s, j^{sa}} \Leftrightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk ve herhangi bir bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBj_s, j_i} \Leftrightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk ve son bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBj_s, j_{ik}, j^{sa}} \Leftrightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk ve

herhangi iki bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBjs,j_{ik},j_i \Leftarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk herhangi bir ve son bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBj^{sa} \Rightarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin bir bağımlı durumuna bağlı simetrik ayırm olasılığı

$S_{BBj_{ik},j^{sa} \Rightarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin art arda iki bağımlı durumuna bağlı simetrik ayırm olasılığı

$S_{BBj_s,j^{sa} \Rightarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk ve herhangi bir bağımlı durumuna bağlı simetrik ayırm olasılığı

$S_{BBj_s,j_i \Rightarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk ve son bağımlı durumuna bağlı simetrik ayırm olasılığı

$S_{BBj_{ik},j_i,2}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin simetrinin iki bağımlı durumunun simetrik olasılığı

$S_{BBj_s,j_{ik},j^{sa} \Rightarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk ve herhangi iki bağımlı durumuna bağlı simetrik ayırm olasılığı

$S_{BBj_s,j_{ik},j_i \Rightarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin bağımlı-bağımsız-bağımlı durumun simetrinin ilk herhangi

bir ve son bağımlı durumuna bağlı simetrik ayırm olasılığı

$S_{BB(j_{ik})_z,(j_i)_z}$: bir bağımlı ve bir bağımsız olasılıklı dağılımin simetrinin durumlarının bulunabileceği olaylara göre simetrik olasılık

S^B : bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu simetrik bulunmama olasılığı

$S^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu kalan simetrik bulunmama olasılığı

$S^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu kalan düzgün simetrik bulunmama olasılığı

$S^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu kalan düzgün olmayan simetrik bulunmama olasılığı

S_0^B : bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu bağımsız simetrik bulunmama olasılığı

$S_0^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu bağımsız kalan simetrik bulunmama olasılığı

$S_0^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı

$S_0^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı

S_D^B : bağımlı ve bir bağımsız olasılıklı farklı dizilipli bağımlı durumun bağımlı simetrik bulunmama olasılığı

$S_D^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan simetrik bulunmama olasılığı

$S_D^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı

$S_D^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı
farklı dizilimli bağımlı durumlu bağımlı
kalan düzgün olmayan simetrik
bulunmama olasılığı

$_0S^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu simetrik bulunmama olasılığı

$_0S^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan simetrik bulunmama olasılığı

${}_0S^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan düzgün simetrik bulunmama olasılığı

$_0S^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı
farklı dizilişli bağımsız-bağımlı durumlu
kalan düzgün olmayan simetrik
bulunmama olasılığı

$_0S_0^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız simetrik bulunmama olasılığı

${}_0S_0^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan simetrik bulunmama olasılığı

${}_0S_0^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı

${}_0S_0^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı

$_0S_D^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı simetrik bulunmama olasılığı

${}_0S_D^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan simetrik bulunmama olasılığı

${}_0S_D^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı

$S_D^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı

${}^0S^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu simetrik bulunmama olasılığı

${}^0S^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir

bağımsız durumlu kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu kalan simetrik bulunmama olasılığı

${}^0S^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu kalan düzgün simetrik bulunmama olasılığı

bağımsız-bağımsız durumlu kalan düzgün olmayan simetrik bulunmama olasılığı

${}^0S_0^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımsız kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımsız kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımsız kalan simetrik bulunmama olasılığı

${}^0S_0^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı veya

bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı

${}_0S_0^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı diziliimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı diziliimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı diziliimli bir bağımlı-bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı diziliimli bağımlı-bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı diziliimli bağımsız-bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı

${}^0S_D^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı simetrik bulunmama olasılığı

veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı simetrik bulunmama olasılığı

${}^0S_D^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı

$^0S_D^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli

bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama

$^1S_1^1$: bir olay için bir durumun tek simetrik olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımlı tek simetrik olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bir bağımlı durumun tek simetrik olasılığı

$^1S_1^{1,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bir bağımlı durumun tek simetrik bulunmama olasılığı

$^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir dizimin bağımlı tek simetrik olasılık

$^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bağımlı tek simetrik olasılık

$^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bağımsız tek simetrik olasılık

$^1S_1^{1,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bağımsız tek simetrik bulunmama olasılığı

${}_{0,1}^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir dizimin bağımsız tek simetrik olasılığı

${}_{0,1t}^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımsız tek simetrik olasılığı

${}_{0,T}^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımin başladığı duruma göre tek simetrik olasılık

S_T : toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu toplam simetrik olasılık

1S : tek simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu tek simetrik olasılık

$^1S^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu tek simetrik bulunmama olasılığı

${}_0S^{BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte simetrik olasılık

${}_0S^{DS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan simetrik olasılık

${}_0S^{DSS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün simetrik olasılık

${}_0S^{DOS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün olmayan simetrik olasılık

${}_0S_0^{BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte simetrik olasılık

${}_0S_0^{DS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan simetrik olasılık

${}_0S_0^{DSS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan düzgün simetrik olasılık

$_0S_0^{DOS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilikli bağımsız birlikte kalan düzgün olmayan simetrik olasılık

$_0S_D^{BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte simetriksel olasılık

$\sigma S_D^{DS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan simetrik olasılık

${}_0S_D^{DSS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan düzgün simetrik olasılık

${}_0S_D^{DOS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan düzgün olmayan simetrik olasılık

$S_{0,T}$: bağımlı ve bir bağımsız olasılıklı
farklı dizilimli bağımlı durumlu bağımsız
toplam simetrik olasılık

$S_{D,T}$: bağımlı ve bir bağımsız olasılıklı
farklı dizilimli bağımlı durumlu bağımlı
toplam simetrik olasılık

$_0S_T$: bağımlı ve bir bağımsız olasılıklı
farklı dizilimli bağımsız-bağımlı durumlu
toplam simetrik olasılık

$S_{0,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilişli bağımsız-bağımlı durumlu bağımsız toplam simetrik olasılık

$_0S_{D,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı toplam simetrik olasılık

0S_T : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu toplam simetrik olasılık veya bağımlı ve

bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu toplam simetrik olasılık

$^0S_{0,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız toplam simetrik olasılık eşitliği veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımsız toplam simetrik olasılık

${}^0S_{D,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı toplam simetrik olasılık

${}_0S^{BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte simetrik bulunmama olasılığı

${}_0S^{DS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan simetrik bulunmama olasılığı

${}_0S^{DSS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün simetrik bulunmama olasılığı

${}_0S^{DOS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S^{BS,B}_0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte simetrik bulunmama olasılığı

${}_0S^{DS,BS,B}_0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan simetrik bulunmama olasılığı

${}_0S^{DSS,BS,B}_0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan düzgün simetrik bulunmama olasılığı

${}_0S^{DOS,BS,B}_0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S^{BS,B}_D$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte simetrik bulunmama olasılığı

${}_0S^{DS,BS,B}_D$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan simetrik bulunmama olasılığı

${}_0S^{DOS,BS,B}_D$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan düzgün olmayan simetrik bulunmama olasılığı

S^B_T : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu toplam simetrik bulunmama olasılığı

$S^B_{0,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız toplam simetrik bulunmama olasılığı

$S^B_{D,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı toplam simetrik bulunmama olasılığı

${}_0S^B_T$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu toplam simetrik bulunmama olasılığı

${}_0S^B_{0,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız toplam simetrik bulunmama olasılığı

${}_0S^B_{D,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı toplam simetrik bulunmama olasılığı

${}^0S^B_T$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu toplam simetrik bulunmama olasılığı

BAĞIMLI VE BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİMLİ DAĞILIMLAR

D

Bağımlı ve Bir Bağımsız Olasılıklı Farlı Dizimli Dağılımlar

- **Kalan Düzgün Olmayan Simetri**
- **Bir Bağımlı-Bir Bağımsız Durumlu
Kalan Düzgün Olmayan Simetri**
- **Bağımlı-Bir Bağımsız Durumlu
Kalan Düzgün Olmayan Simetri**

olasılıklı dağılımlar elde edilebilir. Bu dağılımlar; bağımlı ve bir bağımsız olasılıklı farklı dizimli veya bağımlı ve bir bağımsız olasılıklı farlı dizimsiz dağılımlardır. Durum sayısı olay sayısından küçük olduğunda yapılacak seçimlerde $n - D$ kadar olaya durum belirlenemez. Yapılacak seçimlerde farklı dizimli ve farklı dizimsiz dağılımlarda durum belirlenmeyen olayların durumları sıfır (0) ile gösterilebilir. Bir olasılık dağılımında $n - D$ kadar sıfırın veya aynı bağımsız durumun olması, bağımsız olasılıklı seçimlerde, bir dağılımin birden fazla olayında aynı durumun belirlenebilmesiyle ilgilidir.

Bu bölümde, yapılacak her bir seçimde bir durumun belirlenebileceği **bağımlı durum sayısı bağımlı olay sayısına eşit** ($D = n$ ve " n : bağımlı olay sayısı") seçimlerle elde edilemeyecek, bağımlı ve bir bağımsız olasılıklı farklı dizimli dağılımlar incelenecaktır. Bu dağılımlarda bulunabilecek simetrik durumlar, dağılımin başladığı durumlara göre ayrı ayrı incelenecaktır. Bağımsız durumla başlayan dağılımlar, bağımsız durumdan/lardan sonraki ilk bağımlı durumuna (olasılık dağılımında soldan sağa ilk bağımlı durum) göre sınıflandırılacaktır. Simetri bağımsız durumla başladığında, aynı yöntemle simetrinin başladığı bağımlı durum belirlenir.

Olasılık dağılımları; simetrinin başladığı bağımlı durumla başlayan dağılımlar, simetride bulunmayan bir bağımlı durumla başlayan dağılımlar ve simetride bulunmayan bağımlı durumlarla başlayan dağılımlar olarak sınıflandırılır. Bağımlı ve bir bağımsız olasılıklı farklı dizimli dağılımlarda, bağımlı olasılıklı dağılımlarda olduğu gibi simetride

Önceki bölümlerde durum sayısı olay sayısına eşit veya büyük olan bağımlı olasılıklı dağılımların olasılıkları incelendi. Bu bölümde durum sayısı olay sayısından küçük bağımlı olasılık ($D < n$) veya bağımlı ve bir bağımsız durumlu dağılımin olasılıkları incelenecaktır. Bağımlı durum sayısı bağımlı olay sayısı eşit, bağımlı durum sayısı bağımlı olay sayısından büyük farklı dizimli veya farklı dizimsiz bağımlı durum sayısının bağımlı olay sayısından büyük her bir dağılımına bağımsız olasılıklı seçimle belirlenen bir bağımsız durumun dağılımıyla, bağımlı ve bir bağımsız

bulunan bağımlı durumlarla başlayan dağılımlardan sadece simetrinin ilk bağımlı durumuyla başlayan dağılımlarda simetrik durumlar bulunabilir.

Olasılık dağılımları ilk bağımlı durumuna göre sınıflandırılacağından, aynı bağımlı durumla başlayan olasılık dağılımları, iki farklı dağılım türünden oluşabilir. Bu dağılım türleri, bağımsız durumla başlayan dağılımlar ve bağımlı durumla başlayan dağılımlardır. Bağımsız durumla başlayan dağılımların ilk bağımlı durumu, simetrinin ilk bağımlı durumu olan dağılımlar, simetrinin ilk bağımlı durumuyla başlayan dağılımlar olarak alınır. Eğer bağımsız durumla başlayan dağılımların ilk bağımlı durumu, simetride bulunmayan aynı bir bağımlı durum olan dağılımlar, simetride bulunmayan bir bağımlı durumuyla başlayan dağılımlar olarak alınır. Yada bağımsız durumla başlayan dağılımların ilk bağımlı durumu, simetride bulunmayan bağımlı durumlar olan dağılımların tamamı, simetride bulunmayan bağımlı durumlarla başlayan dağılımlar olarak alınır. Bağımlı durumla başlayan dağılımlardan, bu ilk bağımlı durum, simetrinin ilk bağımlı durumu olan dağılımlar, simetrinin ilk bağımlı durumuyla başlayan dağılımlara dahil edilir. Eğer olasılık dağılımlarından, ilk bağımlı durumu, simetride bulunmayan aynı bağımlı durum olan dağılımlar, simetride bulunmayan bir bağımlı durumla başlayan dağılımlara dahil edilir. Eğer olasılık dağılımlarından, ilk bağımlı durumu, simetride bulunmayan bağımlı durumlar olan dağılımların tümü, simetride bulunmayan bağımlı durumlarla başlayan dağılımlara dahil edilir. Bu iki dağılım türü ilk bağımlı durumlarına göre aynı bağımlı durumuyla oluşturur. İki dağılım türü de aynı bağımlı durumla başlayan dağılımlar altında hem birlikte hem de ayrı ayrı inceleneciktir.

Simetri, bağımlı ve/veya bağımsız durumlarının bulunabileceği sıralamaya göre sınıflandırılacaktır. Simetri durumlarına göre; bağımlı durumla başlayıp bağımlı durumla biten (bağımlı-bağımlı veya sadece bağımlı durumlu), bağımsız durumla başlayıp bağımlı durumla biten (bağımsız-bağımlı), bir bağımlı durumla başlayıp bir bağımsız durumla biten (bir bağımlı-bir bağımsız), bağımlı durumla başlayıp bir bağımsız durumla biten (bağımlı-bir bağımsız), bir bağımlı durumla başlayıp bağımsız durumla biten (bir bağımlı-bağımsız), bağımlı durumla başlayıp bağımsız durumla biten (bağımlı-bağımsız) ve bağımsız durumla başlayıp bağımlı durumları bulunup bağımsız durumla biten (bağımsız-bağımlı-bağımsız) yedi farklı simetri incelemesi ayrı ayrı yapılacaktır.

Simetri, durumlarının bulunduğu sıralamaya göre sınıflandırılarak, hem olasılık dağılımlarının başladığı durumlara göre hem de bunların bağımsız durumla başlayan dağılımları ve bağımlı durumla başlayan dağılımlarına göre; simetrik, düzgün simetrik ve düzgün olmayan simetrik olasılıklar olarak inceleneciktir. Bu simetrik olasılıkların incelenceği ciltlerde simetrik olasılık eşitlikleri de verilecektir.

Bağımlı ve bir bağımsız olasılıklı farklı dizilimlerle dağılımlardaki, simetrik ve düzgün simetrik olasılık eşitlikleri hem olasılık dağılım tablo değerlerinden hem de teorik yöntemle çıkarılabilecektir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimlerle dağılımlardaki, düzgün olmayan simetrik olasılıklar ise sadece teorik yöntemlerle çıkarılacaktır. Bağımlı ve bir bağımsız olasılıklı farklı dizilimlerin inceleneceği ciltlerde, bulunmama olasılıklarının sadece çıkarılabileceği eşitlikler verilecektir.

SİMETRİDE BULUNMAYAN BAĞIMLI DURUMLARLA BAŞLAYAN DAĞILIMLARIN DÜZGÜN OLMAYAN SİMETRİK OLASILIĞI

Simetrik olasılık; düzgün simetrik durumların bulunduğu dağılımlar ile düzgün olmayan simetrik durumların bulunduğu dağılımların toplamı veya düzgün simetrik olasılık ile düzgün olmayan simetrik olasılıkların toplamıdır. Düzgün simetrik olasılık, olasılık dağılımlarında simetrinin durumları arasında farklı bir durum bulunmayan ve aynı sayıda bağımsız durum bulunan dağılımların sayısına veya simetrinin durumlarının aynı sıralama sayısında bulunabildiği dağılımların sayısına düzgün simetrik olasılık denir. Simetri, bağımlı ve bağımsız durumlardan oluşabileceğinden, hem simetri hem de düzgün simetrilerin bulunduğu dağılımlarda bağımsız durumun dağılımdaki sırası yerine, simetrideki sayısı dikkate alınır. Olasılık dağılımında simetrinin durumları arasında, simetride bulunmayan bir durumun bulunduğu dağılımlara veya simetrinin durumlarının aynı sıralama sayısında bulunamadığı dağılımlar, düzgün olmayan simetrinin bulunduğu dağılımlardır. Bu dağılımların sayısına düzgün olmayan simetrik olasılık denir.

Bu ciltlerde düzgün olmayan simetrik olasılığın eşitlikleri teorik yöntemle çıkarılacaktır. Düzgün olmayan simetrik olasılık eşitlikleri, aynı şartlı simetrik olasılıktan, aynı şartı düzgün simetrik olasılığın farkından teorik yöntemle elde edilebilir. Bu nedenle kalan düzgün olmayan simetrik olasılık eşitlikleri de aynı şartlı kalan simetrik olasılıktan, aynı şartlı kalan düzgün simetrik olasılığın farkından teorik yöntemle elde edilebilir.

Bağımsız olasılıklı durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki düzgün olmayan simetrik olasılığın sabit değişkenli işlem uzunluklu eşitliği, aynı şartlı kalan düzgün olmayan simetrik olasılığın sabit değişkenli işlem uzunluklu eşitliğinde n_i üzerinden toplam alımında n yerine $n - 1$ yazılmasıyla da teorik yöntemle elde edilebilecektir.

Bağımlı olasılıklı durumla başlayan dağılımlardan simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki düzgün olmayan simetrik olasılığın eşitliği, aynı şartlı kalan düzgün olmayan simetrik olasılık eşitliğinden, aynı şartlı bağımsız durumlarla başlayan dağılımların kalan düzgün olmayan simetrik olasılık eşitliğinin farkından teorik yöntemle elde edilebileceği gibi aynı şartlı kalan düzgün olmayan simetrik olasılığın sabit değişkenli işlem uzunluklu eşitliğinde n_i üzerinden toplam alımında n_i yerine toplam alınmadan n yazılmasıyla da teorik yöntemle elde edilebilecektir.

Bu ciltte bir bağımlı-bir bağımsız ve bağımlı-bir bağımsız durumlu simetrilerin, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, kalan düzgün olmayan simetrik ve kalan düzgün olmayan simetrik bulunmama olasılıklarının eşitlikleri verilecektir.

BAĞIMLI DURUMLA BAŞLAYAN DAĞILIMLarda BİR BAĞIMLI-BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİ

Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde $\{1, 0\}$, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik olasılıklar; bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan simetrik olasılıktan, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün simetrik olasılığın farkına eşit olur. Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısı için,

$${}^0S_D^{DOS} = {}^0S_D^{DS} - {}^0S_D^{DSS}$$

eşitliği elde edilir. Bu eşitliğe bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde; simetride bulunmayan bağımlı durumlarla başlayan dağılımlardan, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısına **bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık** denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılığı ${}^0S_D^{DOS}$ ile gösterilecektir.

$$D = n < n \wedge I = I = 1 \wedge s = 2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= \frac{n! \cdot (D-1)!}{(\iota-1)!} \cdot \left(\sum_{i=2}^n \mp \frac{1}{i! \cdot (n-i)! \cdot (i+\iota)} \right) - \\ &\quad \frac{(n-1)! \cdot (D-1)!}{(\iota-2)!} \cdot \left(\sum_{i=2}^n \mp \frac{1}{i! \cdot (n-i)! \cdot (i+\iota-1)} \right) - \frac{(n-2)! \cdot (n-\iota-1)}{(\iota-1)!} \end{aligned}$$

$$D = n < n \wedge I = I = 1 \wedge s = 2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= \frac{n! \cdot (n-\iota-1)!}{(\iota-1)!} \cdot \left(\sum_{i=2}^n \mp \frac{1}{i! \cdot (n-i)! \cdot (i+\iota)} \right) - \\ &\quad \frac{(n-1)! \cdot (n-\iota-1)!}{(\iota-2)!} \cdot \left(\sum_{i=2}^{n-\iota} \mp \frac{1}{i! \cdot (n-\iota-i)! \cdot (i+\iota-1)} \right) - \end{aligned}$$

$$\frac{(n-2)! \cdot (n-\iota-1)}{(\iota-1)!}$$

$$D = \mathbf{n} < n \wedge I = \mathbf{I} = 1 \wedge s = 2 \Rightarrow$$

$${}^0S_D^{DOS} = (D-1)! \cdot \sum_{j=2}^n \sum_{(n_i=n)} \sum_{n_s=n-j+2}^{n-j+1} \frac{(n-n_s-1)!}{(j-2)! \cdot (n-n_s-j+1)!} \cdot \frac{(n_s-2)!}{(n_s+j-\mathbf{n}-1)! \cdot (\mathbf{n}-j-1)!}$$

$$D = \mathbf{n} < n \wedge I = \mathbf{I} = 1 \wedge s = 2 \Rightarrow$$

$${}^0S_D^{DOS} = (D-1)! \cdot \sum_{j=2}^D \sum_{(n_i=n)} \sum_{n_s=D-j+2}^{n-j+1} \sum_{(i=2)}^{(D-j+1)} \frac{(n-n_s-1)!}{(j-2)! \cdot (n-n_s-j+1)!} \cdot \frac{(n_s-i-1)!}{(n_s+j-D-2)! \cdot (D-j-i+1)!}$$

$$D = \mathbf{n} < n \wedge I = \mathbf{I} = 1 \wedge s = 2 \Rightarrow$$

$${}^0S_D^{DOS} = (D-1)! \cdot \sum_{j=2}^n \sum_{(n_i=n)} \sum_{n_s=n-j+2}^{n-j+1} \sum_{(i=2)}^{(n-j+1)} \frac{(n-n_s-1)!}{(j-2)! \cdot (n-n_s-j+1)!} \cdot \frac{(n_s-i-1)!}{(n_s+j-\mathbf{n}-2)! \cdot (\mathbf{n}-j-i+1)!}$$

GÜL

BAĞIMLI DURUMLA BAŞLAYAN DAĞILIMLARDA BAĞIMLI-BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİ

Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde $\{1, 2, 3, 4, 5, \mathbf{0}\}$ veya $\{1, 2, \mathbf{0}, \mathbf{0}, \mathbf{0}, 3, 4, \mathbf{0}, \mathbf{0}, 5, \mathbf{0}\}$, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik olasılıklar; bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı kalan simetrik olasılıktan, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı kalan düzgün simetrik olasılığın farkına eşit olur. Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısı için,

$${}^0S_D^{DOS} = {}^0S_D^{DS} - {}^0S_D^{DSS}$$

eşitliği elde edilir. Bu eşitliğe bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde; simetride bulunmayan bağımlı durumlarla başlayan dağılımlardan, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısına **bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık** denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık ${}^0S_D^{DOS}$ ile gösterilecektir.

$$D = n < n \wedge s > 1 \wedge I = I = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & \frac{n! \cdot (D + I - s)!}{(I - I)!} \cdot \left(\sum_{i=s-I+1}^n \mp \frac{(i + I - I)!}{i! \cdot (i + I)! \cdot (n - i)!} \right) - \\ & \frac{(n - 1)! \cdot (D + I - s)!}{(I - I - 1)!} \cdot \left(\sum_{i=s-I+1}^n \mp \frac{(i + I - I - 1)!}{i! \cdot (i + I - 1)! \cdot (n - i)!} \right) - \\ & \frac{(n - s)! \cdot (n + I - I - s)}{(I - I)!} \end{aligned}$$

$$D = n < n \wedge s > 1 \wedge I = I = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

$${}^0S_D^{DOS} = \frac{n! \cdot (D-s)!}{(\iota-I)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i+\iota-I)!}{i! \cdot (i+\iota)! \cdot (\mathbf{n}-i)!} \right) -$$

$$\frac{(n-1)! \cdot (D-s)!}{(n-D-I-1)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i+\iota-I-1)!}{i! \cdot (i+\iota-1)! \cdot (\mathbf{n}-i)!} \right) - \frac{(n-s-I)! \cdot (n-\iota-s)}{(\iota-I)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

$${}^0S_D^{DOS} = \frac{n! \cdot (D+I-s)!}{(\iota-I)!} \cdot \left(\sum_{i=s-I+1}^n \mp \frac{(i+\iota-I)!}{i! \cdot (i+\iota)! \cdot (\mathbf{n}-i)!} \right) -$$

$$\frac{(n-1)! \cdot (n+I-\iota-s)!}{(\iota-I-1)!} \cdot \left(\sum_{i=s-I+1}^n \mp \frac{(i+\iota-I-1)!}{i! \cdot (i+\iota-1)! \cdot (\mathbf{n}-i)!} \right) -$$

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

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

$${}^0S_D^{DOS} = \frac{n! \cdot (D-s)!}{(\iota-I)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i+\iota-I)!}{i! \cdot (i+\iota)! \cdot (\mathbf{n}-i)!} \right) -$$

$$\frac{(n-1)! \cdot (D-s)!}{(\iota-I-1)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i+\iota-I-1)!}{i! \cdot (i+\iota-1)! \cdot (\mathbf{n}-i)!} \right) - \frac{(n-s-I)! \cdot (n-\iota-s)}{(\iota-I)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

$${}^0S_D^{DOS} = \frac{n! \cdot (n+I-\iota-s)!}{(\iota-I)!} \cdot \left(\sum_{i=s-I+1}^n \mp \frac{(i+\iota-I)!}{i! \cdot (i+\iota)! \cdot (\mathbf{n}-i)!} \right) -$$

$$\frac{(n-1)! \cdot (n+I-\iota-s)!}{(\iota-I-1)!} \cdot \left(\sum_{i=s-I+1}^n \mp \frac{(i+\iota-I-1)!}{i! \cdot (i+\iota-1)! \cdot (\mathbf{n}-i)!} \right) -$$

$$\frac{(n-s)! \cdot (n+I-s)}{(\iota-I)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

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

$$\begin{aligned} {}^0S_D^{DOS} = & \frac{n! \cdot (n - \iota - s)!}{(\iota - I)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i + \iota - I)!}{i! \cdot (i + \iota)! \cdot (\mathbf{n} - i)!} \right) - \\ & \frac{(n - 1)! \cdot (n - \iota - s)!}{(\iota - I - 1)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i + \iota - I - 1)!}{i! \cdot (i + \iota - 1)! \cdot (\mathbf{n} - i)!} \right) - \\ & \frac{(n - s - I)! \cdot (n - \iota - s)}{(\iota - I)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = s + 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j=s+1}^D \sum_{(n_i=n)} \sum_{n_s=D-j+2}^{n-j} \\ & \frac{(j - 2)!}{(j - s - 1)! \cdot (s - 1)!} \cdot \frac{(n - n_s - 1)!}{(j - 2)! \cdot (n - n_s - j + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j - D - 1)! \cdot (D - j)!} + \\ & \sum_{j=s+2}^D \sum_{(n_i=n)} \sum_{n_s=n-j+1} \\ & \frac{(j - 2)!}{(j - s - 1)! \cdot (s - 1)!} \cdot \frac{(n - n_s - 1)!}{(j - 2)! \cdot (n - n_s - j + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j - D - 1)! \cdot (D - j)!} + \\ & (D - s)! \cdot \sum_{(j=s+1)}^D \sum_{(n_i=n)} \sum_{n_s=n-j+1} \\ & \frac{(n_s - 2)!}{(n_s + j - D - 1)! \cdot (D - j - 1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = s + 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j=s+1}^n \sum_{(n_i=n)} \sum_{n_s=\mathbf{n}-j+2}^{n-j} \\ & \frac{(j - 2)!}{(j - s - 1)! \cdot (s - 1)!} \cdot \frac{(n - n_s - 1)!}{(j - 2)! \cdot (n - n_s - j + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j - \mathbf{n} - 1)! \cdot (\mathbf{n} - j)!} + \\ & \sum_{j=s+2}^n \sum_{(n_i=n)} \sum_{n_s=n-j+1} \\ & \frac{(j - 2)!}{(j - s - 1)! \cdot (s - 1)!} \cdot \frac{(n - n_s - 1)!}{(j - 2)! \cdot (n - n_s - j + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j - \mathbf{n} - 1)! \cdot (\mathbf{n} - j)!} + \end{aligned}$$

$$(D-s)! \cdot \sum_{(j=s+1)}^n \sum_{(n_i=n)} \sum_{n_s=n-j+1}^{n-j_i} \frac{(n_s-2)!}{(n_s+j-n-1)! \cdot (n-j-1)!}$$

$$D = n < n \wedge s > 1 \wedge k = 0 \wedge I = I = 1 \wedge s = s + 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_i=s+1}^D \sum_{(n_i=n)} \sum_{n_s=D-j_i+2}^{n-j_i} \\ & \frac{(j_i-2)!}{(j_i-s-1)! \cdot (s-1)!} \cdot \\ & \frac{(n-n_s-1)!}{(j_i-2)! \cdot (n-n_s-j_i+1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-D-1)! \cdot (D-j_i)!} + \\ & \sum_{j_i=s+2}^D \sum_{(n_i=n)} \sum_{n_s=n-j_i+1}^{n-j_i} \\ & \frac{(j_i-2)!}{(j_i-s-1)! \cdot (s-1)!} \cdot \\ & \frac{(n-n_s-1)!}{(j_i-2)! \cdot (n-n_s-j_i+1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-D-1)! \cdot (D-j_i)!} + \\ & (D-s)! \cdot \sum_{(j_i=s+1)}^n \sum_{(n_i=n)} \sum_{n_s=n-j_i+1}^{n-j_i} \\ & \frac{(n_s-2)!}{(n_s+j_i-D-1)! \cdot (D-j_i-1)!} \end{aligned}$$

$$D = n < n \wedge s > 1 \wedge k = 0 \wedge I = I = 1 \wedge s = s + 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_i=s+1}^n \sum_{(n_i=n)} \sum_{n_s=n-j_i+2}^{n-j_i} \\ & \frac{(j_i-2)!}{(j_i-s-1)! \cdot (s-1)!} \cdot \\ & \frac{(n-n_s-1)!}{(j_i-2)! \cdot (n-n_s-j_i+1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} + \end{aligned}$$

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

$$\sum_{j_i=s+2}^n \sum_{(n_i=n)} \sum_{n_s=n-j_i+1}$$

$$\frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!}.$$

$$\frac{(n - n_s - 1)!}{(j_i - 2)! \cdot (n - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \sum_{(j_i=s+1)}^n \sum_{(n_i=n)} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{j_i-s+1} \sum_{(j_i=s+1)}^D \sum_{(n_i=n)} \sum_{n_s=D-j_i+2}^{n-j_i}$$

$$\frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!}.$$

$$\frac{(n - n_s - 1)!}{(j_i - 2)! \cdot (n - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - D - 1)! \cdot (D - j_i)!} +$$

$$\sum_{j_s=2}^{j_i-s} \sum_{(j_i=s+2)}^D \sum_{(n_i=n)} \sum_{n_s=n-j_i+1}$$

$$\frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!}.$$

$$\frac{(n - n_s - 1)!}{(j_i - 2)! \cdot (n - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - D - 1)! \cdot (D - j_i)!} +$$

$$(D - s)! \cdot \sum_{j_s=j_i-s+1}^{\infty} \sum_{(j_i=s+1)}^D \sum_{(n_i=n)} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_s - 2)!}{(n_s + j_i - D - 1)! \cdot (D - j_i - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{j_i-s+1} \sum_{(j_i=s+1)}^n \sum_{(n_i=n)} n_s \sum_{n_s=n-j_i+2}^{n-j_i}$$

$$\frac{(j_i-2)!}{(j_i-s-1)! \cdot (s-1)!}.$$

$$\frac{(n-n_s-1)!}{(j_i-2)! \cdot (n-n_s-j_i+1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{j_s=2}^{j_i-s} \sum_{(j_i=s+2)}^n \sum_{(n_i=n)} n_s \sum_{n_s=n-j_i+1}^{n-j_i}$$

$$\frac{(j_i-2)!}{(j_i-s-1)! \cdot (s-1)!}.$$

$$\frac{(n-n_s-1)!}{(j_i-2)! \cdot (n-n_s-j_i+1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +$$

$$(D-s)! \cdot \sum_{j_s=j_i-s+1}^D \sum_{(j_i=s+1)}^n \sum_{(n_i=n)} n_s \sum_{n_s=n-j_i+1}^{n-j_i}$$

$$\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i-1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \wedge \mathbb{k} = 0 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j=s+1}^D \sum_{(n_i=n)} n_s \sum_{n_s=D-j+2}^{n-j} \sum_{i=2}^{D-j+1}$$

$$\frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n-n_s-1)!}{(j-2)! \cdot (n-n_s-j+1)!}.$$

$$\left(\frac{(n_s-2)!}{(n_s+j-D-2)! \cdot (D-j)!} + \frac{(n_s-i-1)!}{(n_s+j-D-2)! \cdot (D-j-i+1)!} \right) +$$

$$\sum_{j=s+2}^D \sum_{(n_i=n)} n_s \sum_{n_s=n-j+1}^{n-j} \sum_{i=2}^{D-j+1}$$

$$\frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n-n_s-1)!}{(j-2)! \cdot (n-n_s-j+1)!}.$$

$$\left(\frac{(n_s-2)!}{(n_s+j-D-2)! \cdot (D-j)!} + \frac{(n_s-i-1)!}{(n_s+j-D-2)! \cdot (D-j-i+1)!} \right) +$$

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

$$(D-s)! \cdot \sum_{j=s+1}^D \sum_{(n_i=n)} \sum_{n_s=n-j+1} \sum_{i=2}^{D-j+1} \frac{(n_s - i - 1)!}{(n_s + j - D - 2)! \cdot (D - j - i + 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \wedge \mathbb{k} = 0 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j=s+1}^n \sum_{(n_i=n)} \sum_{n_s=n-j+2}^{n-j} \sum_{i=2}^{n-j+1} \\ &\quad \frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n-n_s-1)!}{(j-2)! \cdot (n-n_s-j+1)!} \cdot \\ &\quad \left(\frac{(n_s-2)!}{(n_s+j-\mathbf{n}-2)! \cdot (\mathbf{n}-j)!} + \frac{(n_s-i-1)!}{(n_s+j-\mathbf{n}-2)! \cdot (\mathbf{n}-j-i+1)!} \right) + \\ &\quad \sum_{j=s+2}^n \sum_{(n_i=n)} \sum_{n_s=n-j+1} \sum_{i=2}^{n-j+1} \\ &\quad \frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n-n_s-1)!}{(j-2)! \cdot (n-n_s-j+1)!} \cdot \\ &\quad \left(\frac{(n_s-2)!}{(n_s+j-\mathbf{n}-2)! \cdot (\mathbf{n}-j)!} + \frac{(n_s-i-1)!}{(n_s+j-\mathbf{n}-2)! \cdot (\mathbf{n}-j-i+1)!} \right) + \\ &\quad (D-s)! \cdot \sum_{j=s+1}^n \sum_{(n_i=n)} \sum_{n_s=n-j+1} \sum_{i=2}^{n-j+1} \\ &\quad \frac{(n_s-i-1)!}{(n_s+j-\mathbf{n}-2)! \cdot (\mathbf{n}-j-i+1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(n_i=n)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\ &\quad \frac{(j^{sa}+j_{sa}^{ik}-j_{sa}-2)!}{(j^{sa}-j_{sa}-1)! \cdot (j_{sa}^{ik}-1)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-2)! \cdot (n_i-n_{sa}-j^{sa}-\mathbb{k}+1)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{n_i=n}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-n_{ik}-1)!} \\
& \frac{(j_{ik}-2)!}{(j_{ik}-j_{sa}^{ik}-1)! \cdot (j_{sa}^{ik}-1)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} - \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+j_{sa}-1)}^{n+s-1} \sum_{(n_i=n)}^{(n_i-j^{sa}-\mathbb{k}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-n_{ik}-1)!} \\
& \frac{(n_{sa}+j^{sa}-s-3)!}{(n_{sa}+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-s-1)!} \\
& D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-1)}^{(j^{sa}-1)!} \sum_{(n_i=n)}^{(n_i-j^{sa}-\mathbb{k}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-n_{ik}-1)!} \\
& \frac{(j^{sa}-3)!}{(j^{sa}-j_{sa}-1)! \cdot (j_{sa}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \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})!} + \\
& (D-s)! \cdot \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa})}^{(j^{sa}-2)} \sum_{n_i=n}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-n_{ik}-1)!} \\
& \frac{(j_{ik}-2)!}{(j_{ik}-j_{sa})! \cdot (j_{sa}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} -
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j^{sa} = j_{sa} + 1}^{n + j_{sa} - s} \sum_{(j_{ik} = j^{sa} - 1)} \sum_{(n_i = n)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 2}^{n_i - j^{sa} - \mathbb{k} + 1} \frac{(n_{sa} + j^{sa} - s - 3)!}{(n_{sa} + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{sa} = s \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot$$

$$\sum_{j^{sa} = s + 1}^n \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - s)} \sum_{(n_i = n)} \sum_{n_s = \mathbf{n} - j^{sa} + 2}^{n_i - j^{sa} - \mathbb{k} + 1} \sum_{(i=2)}^{(n - j^{sa} + 1)} \frac{(j^{sa} + j_{sa}^{ik} - s - 2)!}{(j^{sa} - s - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_s - j^{sa} - \mathbb{k} + 1)!} \cdot \\ \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) + (D - s)! \cdot$$

$$\sum_{j^{sa} = s + 2}^n \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j^{sa} + j_{sa}^{ik} - s - 1)} \sum_{n_i = n} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_i - j_{ik} + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 2}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}} \sum_{(i=2)}^{(\mathbf{n} - j^{sa} + 1)} \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j^{sa})!} \cdot \\ \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) - (D - s)! \cdot \sum_{j_s = 2}^{n-s+1} \sum_{(j^{sa} = j_s + s - 1)} \sum_{(n_i = n)} \sum_{n_s = \mathbf{n} - j^{sa} + 2}^{n_i - j^{sa} - \mathbb{k} + 1} \sum_{(i=2)}^{(\mathbf{n} - j^{sa} + 1)} \frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{K}_z : z = 1 \wedge j_{sa} = s \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot$$

$$\sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=n)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=2)}^{(n_i-j^{sa}+1)}$$

$$\frac{(j^{sa} - 3)!}{(j^{sa} - s - 1)! \cdot (s - 2)!}.$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_s - j^{sa} - \mathbb{k} + 1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) +$$

$$(D - s)! \cdot$$

$$\sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=s)} \sum_{n_i=n} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(n_i-j^{sa}+1)}$$

$$\frac{(j_{ik} - 2)!}{(j_{ik} - s)! \cdot (s - 2)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=n)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=)}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{K}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(n_i=n)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1}$$

$$\frac{(j^{sa} - 3)!}{(j^{sa} - j_{sa} - 1)! \cdot (j_{sa} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}.$$

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

$$\begin{aligned}
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j^{sa} = j_{sa} + 2}^{n + j_{sa} - s} \sum_{(j_{ik} = j_{sa} + 1)}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{n_i = n}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 2)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}} \sum_{n_{sa} = n - j^{sa} + 2}^{(n_{sa} - 1)!} \\
& \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}{(n_{sa} + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!} - \\
& (D - s)! \cdot \sum_{j_s = 2}^{n - s + 1} \sum_{(j^{sa} = j_s + j_{sa} - 1)}^{(n - s + 1)} \sum_{(n_i = n)}^{(n_i - j^{sa} - \mathbb{k} + 1)} \sum_{n_{sa} = n - j^{sa} + 2}^{(n_{sa} + j^{sa} - s - 3)!} \\
& \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot
\end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
^0S_D^{DOS} &= (D - s)! \cdot \sum_{j^{sa} = j_{sa} + 1}^{n + j_{sa} - s} \sum_{(n_i = n)}^{(n_i - j^{sa} - \mathbb{k} + 1)} \sum_{n_{sa} = n - j^{sa} + 2}^{(n_{sa} + j^{sa} - s - 3)!} \\
& \frac{(j^{sa} - 3)!}{(j^{sa} - j_{sa} - 1)! \cdot (j_{sa} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j^{sa} = j_{sa} + 2}^{n + j_{sa} - s} \sum_{(j_{ik} = j_{sa})}^{(j^{sa} - 2)} \sum_{n_i = n}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 2)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}} \sum_{n_{sa} = n - j^{sa} + 2}^{(n_{sa} - 1)!} \\
& \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa})! \cdot (j_{sa} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}.
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j^{sa} = j_{sa} + 1}^{n+j_{sa}-s} \sum_{(j_{ik} = j^{sa} - 1)} \sum_{(n_i = n)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 2}^{n_i - j^{sa} - \mathbb{k} + 1}$$

$$\frac{(n_{sa} + j^{sa} - s - 3)!}{(n_{sa} + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{sa} = s \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j^{sa} = s + 1}^n \sum_{(n_i = n)} \sum_{n_s = \mathbf{n} - j^{sa} + 2}^{n_i - j^{sa} - \mathbb{k} + 1} \sum_{(i=2)}^{(\)} \sum_{(n-j^{sa}+1)}^{(\)} \frac{(j^{sa} - 3)!}{(j^{sa} - s - 1)! \cdot (s - 2)!} \cdot$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_s - j^{sa} - \mathbb{k} + 1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) + (D - s)! \cdot$$

$$\sum_{j^{sa} = s + 2}^n \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j^{sa} + j_{sa}^{ik} - s - 1)} \sum_{n_i = n} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_i - j_{ik} + 1)} \sum_{n_s = \mathbf{n} - j^{sa} + 2}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}} \sum_{(i=2)}^{(n-j^{sa}+1)} \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) - (D - s)! \cdot \sum_{j_s = 2}^{n-s+1} \sum_{(j^{sa} = j_s + s - 1)} \sum_{(n_i = n)} \sum_{n_s = \mathbf{n} - j^{sa} + 2}^{n_i - j^{sa} - \mathbb{k} + 1} \sum_{(i=2)}^{(\)} \sum_{(n-j^{sa}+1)}^{(\)}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{K}_z : z = 1 \wedge j_{sa} = s \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(n_i=n)}^{\mathbf{n}} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=2)}^{(\mathbf{n}-j^{sa}+1)} \\
&\quad \frac{(j^{sa}-3)!}{(j^{sa}-s-1)! \cdot (s-2)!} \cdot \\
&\quad \frac{(n_i-n_s-\mathbb{k}-1)!}{(j^{sa}-2)! \cdot (n_i-n_s-j^{sa}-\mathbb{k}+1)!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{(n_s+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-j^{sa})!} + \frac{(n_s-i-1)!}{(n_s+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-j^{sa}-i+1)!} \right) + \\
&\quad (D-s)! \cdot \\
&\quad \sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=s)}^{(j^{sa}-2)} \sum_{n_i=n} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j^{sa}+1)} \\
&\quad \frac{(j_{ik}-2)!}{(j_{ik}-s)! \cdot (s-2)!} \cdot \\
&\quad \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_s-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j^{sa})!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{(n_s+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-j^{sa})!} + \frac{(n_s-i-1)!}{(n_s+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-j^{sa}-i+1)!} \right) - \\
&\quad (D-s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)}^{\mathbf{n}} \sum_{(n_i=n)}^{\mathbf{n}} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=2)}^{\mathbf{n}} \\
&\quad \frac{(n_s+j^{sa}-s-3)!}{(n_s+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-s-1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{K}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \\
&\quad \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{n_i=n} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j^{sa}+j_{sa}^{ik}-j_{sa}-2)!}{(j^{sa}-j_{sa}-1)! \cdot (j_{sa}^{ik}-1)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!}.
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \\
& \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{n_i=n}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-n_{ik}-1)!} \\
& \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} - \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+j_{sa}-1)}^{n-s+1} \sum_{(n_i=n)}^{(n_i-j^{sa}-\mathbb{k}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\
& \frac{(n_{sa} + j^{sa} - s - 3)!}{(n_{sa} + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!} \\
D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
^0S_D^{DOS} = (D - s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-1)}^{n+j_{sa}-s} \sum_{n_i=n}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{ik}-\mathbb{k}-1} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-n_{ik}-1)!} \\
& \frac{(j^{sa} - 3)!}{(j^{sa} - j_{sa} - 1)! \cdot (j_{sa} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} +
\end{aligned}$$

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

$$\begin{aligned}
& (D-s)! \cdot \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa})}^{(j^{sa}-2)} \sum_{n_i=n}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k})} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-n_{ik}-1)!} \\
& \frac{(j_{ik}-2)!}{(j_{ik}-j_{sa})! \cdot (j_{sa}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} - \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
& (D-s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-1)}^{(n_i=n)} \sum_{n_{sa}=n-j^{sa}+2}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
& \frac{(n_{sa}+j^{sa}-s-3)!}{(n_{sa}+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-s-1)!} \\
& D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{sa} = s \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \\
& \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-s)}^{(n_i=n)} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j^{sa}+1)} \\
& \frac{(j^{sa}+j_{sa}^{ik}-s-2)!}{(j^{sa}-s-1)! \cdot (j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j^{sa}-\mathbb{k})!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-j^{sa})!} + \frac{(n_s-i-1)!}{(n_s+j^{sa}-\mathbf{n}-2)! \cdot (\mathbf{n}-j^{sa}-i+1)!} \right) + \\
& (D-s)! \cdot
\end{aligned}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+s-1)} \sum_{(n_i=n)} \sum_{n_s=\mathbf{n}-j^{sa}+2} \sum_{(i=)}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge j_{sa} = s \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$^0S_D^{DOS} = (D - s)! \cdot$$

$$\sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{n_i=n} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)} \sum_{n_s=\mathbf{n}-j^{sa}+2} \sum_{(i=2)}$$

$$\frac{(j^{sa} - 3)!}{(j^{sa} - s - 1)! \cdot (s - 2)!}.$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j^{sa} - \mathbb{k})!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) +$$

$$(D - s)! \cdot$$

$$\sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=s)} \sum_{n_i=n} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)} \sum_{n_s=\mathbf{n}-j^{sa}+2} \sum_{(i=2)}$$

$$\frac{(j_{ik} - 2)!}{(j_{ik} - s)! \cdot (s - 2)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=n)} \sum_{n_s=\mathbf{n}-j^{sa}+2} \sum_{(i=)}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

GÜLDÜNYA

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_{ik}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{n_{sa}=n+j_{sa}-s}^{n+j_{sa}-s} \\ &\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\ &\quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j^{sa}=j_s+j_{sa}-1} \end{aligned}$$

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

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\left(\right)} \\ \left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j^{sa}}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \\ \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \\ \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{s}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{n}{s}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\binom{n}{s}}$$

$$\frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_{z:z} = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\binom{n}{s}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}}{s}} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}}{s}} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\)}{}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{\)}{}} \\
& \sum_{(n_i=n)}^{\binom{\)}{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{\)}{}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\binom{\)}{}} \\
& \frac{(n_i + j_s + j_{sa} - j^{sa} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa} - j^{sa} - s - j_{sa}^s)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\)}{(n+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\binom{\)}{}} \\
& \sum_{(n_i=n)}^{\binom{\)}{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{\)}{(n_{is}+j_s-j_{ik})}} \sum_{n_{sa}=n-j^{sa}+2}^{\binom{\)}{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\)}{(n+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{\)}{n+j_{sa}-s}} \\
& \sum_{(n_i=n)}^{\binom{\)}{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{\)}{(n_{is}+j_s-j_{ik})}} \sum_{n_{sa}=n-j^{sa}+2}^{\binom{\)}{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{s}} \\
&\quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{n+j_{sa}^{ik}-s}{s}}
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n+j_{sa}^{ik}-s)} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} +
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\mathbf{(n+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\mathbf{(n+j_{sa}^{ik}-s)}} \\
&\quad \sum_{(n_i=n)}^{\mathbf{()}} \sum_{n_{is}=\mathbf{n+k-j_s+2}}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbf{k-j_{ik}+2})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n-j^{sa}+2}}^{n_{ik}+j_{ik}-j^{sa}-\mathbf{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-\mathbf{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbf{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\mathbf{(n+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n+j_{sa}^{ik}-s}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\mathbf{()}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\mathbf{()}} \\
&\quad \sum_{(n_i=n)}^{\mathbf{()}} \sum_{n_{is}=\mathbf{n+k-j_s+2}}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\mathbf{()}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}}^{\mathbf{()}} \\
&\quad \frac{(n_i+2 \cdot j_{ik}+j_{sa}^s+j_{sa}-j_s-j^{sa}-2 \cdot j_{sa}^{ik}-s-I)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+2 \cdot j_{ik}+j_{sa}^s+j_{sa}-j_s-j^{sa}-2 \cdot j_{sa}^{ik}-s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_{ik}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{n_{sa}=n+j_{sa}-s}^{n+j_{sa}-s} \\ &\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\ &\quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j^{sa}=j_s+j_{sa}-1} \end{aligned}$$

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

$$\sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - I - j_{sa}^{ik})!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{} \\ \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{ls}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\ \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{ls}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\left(\right)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}.$$

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

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

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\infty} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\infty} \\
& \left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j^{sa}} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_{\mathbf{z}}: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{D \theta S} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\infty} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\infty} \\
& \frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}.
\end{aligned}$$

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\infty} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\infty} \\
& \frac{(n_i + j_s + j_{sa} - j_{ik} - s - I - j_{sa}^s - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa} - j_{ik} - s - j_{sa}^s - 1)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{is}+j_s-j_{ik}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+2}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{is}+j_s-j_{ik}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik})}^{\infty} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\infty} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - 2 \cdot j^{sa} - s - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - 2 \cdot j^{sa} - s - 2 \cdot j_{sa}^s + 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\infty} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+2}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\infty} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}
\end{aligned}$$

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

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\left(\right)}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(n+j_{sa}^{ik}-s\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}$$

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+2}^{\left(n+j_{sa}^{ik}-s\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\left(\right)} \\
& \frac{(n_i + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - 2 \cdot j_{sa} - s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - 2 \cdot j_{sa} - s + 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+2}^{\left(n+j_{sa}-s\right)}
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\ \right)} \sum_{j^{sa}=j_{ik}+1}^{n_s+1} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\ \right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{} \\
& \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j_{ik}-1)!}{(\mathbf{n}+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(n_i+j^{sa}+j_{sa}^s-j_s-j_{sa}^{ik}-s-I-1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j^{sa}+j_{sa}^s-j_s-j_{sa}^{ik}-s-1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j_{ik}-1)!}{(\mathbf{n}+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}.
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}^{ik}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{n-s+1 \\ (n+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+1}^{n_{ik}-\mathbb{k}-1} \\
& \sum_{(n_i=n)}^{\substack{() \\ (n_i=n)}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+jsa-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}^{ik}-s} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+ j_{sa}^{ik} - s) \\ (j_{ik} = j_s + j_{sa}^{ik} - 1)}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+jsa-s) \\ (j_{ik}=j_s+j_{sa}-1)}} \sum_{j^{sa}=j_{ik}+1}^{(n+j_{sa}^{ik}-s)} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j_{ik}-1)!}{(\mathbf{n}+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+jsa-s) \\ (j_{ik}=j_s+j_{sa}-1)}} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(\) \\ (j_{ik}=j_s+j_{sa}-1)}} \sum_{j^{sa}=j_{ik}+1}^{()} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n-j_s+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{n_{is}+j_s-j_{ik}}} \\
&\quad \sum_{(n_i=n)}^{\binom{n}{n-j_s+2}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_{i-j_s+1}} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}}{n_{is}+j_s-j_{ik}}} \sum_{n_{sa}=n-j_{sa}+2}^{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}{n_{sa}+j_{sa}-\mathbf{n}}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n-j_s+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{n+j_{sa}^{ik}-s}{n_{is}+j_s-j_{ik}}} \\
&\quad \sum_{(n_i=n)}^{\binom{n}{n-j_s+2}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_{i-j_s+1}} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}}{n_{is}+j_s-j_{ik}}} \sum_{n_{sa}=n-j_{sa}+2}^{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}{n_{sa}+j_{sa}-\mathbf{n}}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n-j_s+1}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{n-j_s+1}}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0 S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\mathbf{n}+j_{sa}^{ik}-s}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\binom{\mathbf{n}}{s}} \\
& \sum_{(n_i=n)}^{\binom{\mathbf{n}}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{is}+j_s-j_{ik}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!}.
\end{aligned}$$

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

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(n_{sa}-1\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_i-j_s+1) \\ (n_{ik}=n_{is}+j_s-j_{ik})}} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{ik}+j^{sa}-j_s-s-\mathbb{k}-2)!}{(n_{ik}+j^{sa}-\mathbf{n}-\mathbb{k}-j_{sa}^s-2)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j_{ik}-1)!}{(\mathbf{n}+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+jsa-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}^{ik}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\mathbf{n}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n+j_{sa}^{ik}-s)} \\
&\quad \sum_{(n_i=n)}^{()} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{()} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}^{()} \\
&\quad \sum_{(n_i=n)}^{()} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}
\end{aligned}$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\infty} \\ &\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\infty} \\ &\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{n}{s}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\binom{n}{s}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{is} + j_s - n_{sa} - j^{sa} - s - 2 \cdot \mathbb{k} - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_i+j_s-j_{ik}}{s}} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_i+j_s-j_{ik}}{s}} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}.
\end{aligned}$$

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

$$\begin{aligned}
& \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\mathbf{n}}{}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{\mathbf{n}}{}} \\
& \sum_{(n_i=n)}^{\binom{\mathbf{n}}{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{\mathbf{n}}{}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\binom{\mathbf{n}}{}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\mathbf{n}+j_{sa}^{ik}-s}{}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\binom{\mathbf{n}}{}} \\
& \sum_{(n_i=n)}^{\binom{\mathbf{n}}{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\mathbf{n}+j_{sa}^{ik}-s}{}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{\mathbf{n}+j_{sa}-s}{}}
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{\left(\right)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_{sa} - j_s - j^{sa} - s - 2 \cdot \mathbb{k} - 1)!}{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow \\
{}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{\substack{(n_{ik}=j_s+j_{sa}^{ik}-1)}}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{\mathbf{n}+j_{sa}-s}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+1}^{(n+j_{sa}^{ik}-s)} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j_{ik}-1)!}{(\mathbf{n}+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
&\quad \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+2}^{(n+j_{sa}^{ik}-s)} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+1}^{(\)} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
&\quad \frac{(2 \cdot n_{is} + j_s - n_{sa} - j_{ik} - s - 2 \cdot \mathbb{k} - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+1}^{\substack{(n+j_{sa}-s)}} \\ &\quad \sum_{(n_i=n)}^{\substack{(\)}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{n_{is}+j_s-j_{ik}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j_{ik}-1)!}{(\mathbf{n}+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\ &\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\ &\quad \sum_{(n_i=n)}^{\substack{(\)}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{n_{is}+j_s-j_{ik}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\ &\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(\)}} \sum_{j^{sa}=j_{ik}+1}^{\substack{(\)}} \\ &\quad \sum_{(n_i=n)}^{\substack{(\)}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\substack{(\)}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}. \end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+1}^{(n+j_{sa}^{ik}-s)} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+2}^{(n+j_{sa}^{ik}-s)} \sum_{n_{sa}=n-j^{sa}+2}^{n+j_{sa}-s} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+1}^{(n)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{n_i-j_s+1} \end{aligned}$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n_{is}+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+1}^{\substack{(n_{ik}-\mathbb{k}-1)}} \\ &\quad \sum_{(n_i=n)}^{\substack{(\)}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n_{is}+j_{sa}^{ik}-s)}} \sum_{j^{sa}=j_{ik}+2}^{\substack{n+j_{sa}-s}} \\ &\quad \sum_{(n_i=n)}^{\substack{(\)}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(\)}} \sum_{j^{sa}=j_{ik}+1}^{\substack{()}} \end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{ik} + j_{ik} - n_{sa} - j_s - s - 2 \cdot \mathbb{k} - 2)!}{(2 \cdot n_{ik} + j_{ik} - n_{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n_{ik}-\mathbb{k}-1} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} -
\end{aligned}$$

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

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

$$\sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{(\)}$$

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

$$\frac{(n_{is} + n_{ik} - n_{sa} - s - 2 \cdot \mathbb{k} - 2)!}{(n_{is} + n_{ik} + j_s - n_{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j^{sa}=j_s+j_{sa}-1}^{(\)}$$

$$\sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

$$\sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \quad \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \quad \left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j^{sa}}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\quad \left. \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right. \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \right. \\
&\quad \left. \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \right. \\
&\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \\
&\quad \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \right. \\
&\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \right. \\
&\quad \left. \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)
\end{aligned}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{n-s+1 \\ ()}} \sum_{\substack{() \\ (j^{sa}=j_s+j_{sa}-1)}}^{\substack{() \\ ()}} \\
& \sum_{(n_i=n)}^{\substack{() \\ ()}} \sum_{\substack{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2 \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}^{\substack{n_i-j_s+1 \\ ()}} \sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\substack{() \\ ()}} \\
& \left(\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - s)!} \right)_{j^{sa}} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{n-s+1 \\ ()}} \sum_{\substack{() \\ (j^{sa}=j_s+j_{sa}-1)}}^{\substack{() \\ ()}} \\
& \sum_{(n_i=n)}^{\substack{() \\ ()}} \sum_{\substack{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2 \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}}^{\substack{n_i-j_s+1 \\ ()}} \sum_{\substack{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\substack{() \\ ()}} \sum_{\substack{n_{sa}=n-j^{sa}+2 \\ ()}}^{\substack{() \\ ()}} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
& \quad \sum_{\substack{() \\ (n_i=n)}}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{\substack{() \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \quad \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik})}}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \quad \sum_{\substack{() \\ (n_i=n)}}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{\substack{() \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& \quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-j_s+1} \\
& \quad \sum_{\substack{() \\ (n_i=n)}}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}^{} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
\end{aligned}$$

$$\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} j^{sa} = j_s + j_{sa} - 1 \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \right) \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\mathbf{(n+j}_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\mathbf{n+j}_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\right.} \sum_{n_{is}=\mathbf{n+k}_1+\mathbf{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n+k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbf{k}_1)} \sum_{n_{sa}=\mathbf{n-j}^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right.} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left.\right)} \\
& \sum_{(n_i=n)}^{\left(\right.} \sum_{n_{is}=\mathbf{n+k}_1+\mathbf{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1)}^{(n_i-s-\mathbf{k}_1-\mathbf{k}_2-1)!} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}^{\left.\right)} \\
& \frac{(n_i-s-\mathbf{k}_1-\mathbf{k}_2-1)!}{(n_i-\mathbf{n}-\mathbf{k}_1-\mathbf{k}_2-1)! \cdot (\mathbf{n}-s-1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right.} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left.\right)} \\
& \sum_{(n_i=n)}^{\left(\right.} \sum_{n_{is}=\mathbf{n+k}_1+\mathbf{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n+k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbf{k}_1)} \sum_{n_{sa}=\mathbf{n-j}^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}
\end{aligned}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} j^{sa} = j_s + j_{sa} - 1$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} j^{sa} = j_s + j_{sa} - 1$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \right) \sum_{n+j_{sa}-s}^{n+1}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}.$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}.
\end{aligned}$$

$$\begin{aligned}
& \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - j_{ik} - j^{sa} - s - I - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - j_{ik} - j^{sa} - s - 2 \cdot j_{sa}^s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}.
\end{aligned}$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot
\end{aligned}$$

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

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

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^s - j_s - j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^s - j_s - j_{sa} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-s+1}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\ \right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 2 \cdot j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 2 \cdot j_{sa} - s)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z : z = 1 & \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\left(\right)} \sum_{n+j_{sa}-s}^{\left(\right)} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s-1)!}{(n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-1)! \cdot (\mathbf{n}+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot
\end{aligned}$$

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

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

$$\sum_{\substack{() \\ (n_i=n)}} \sum_{\substack{n_i-j_s+1 \\ n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \\ \frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{\substack{n-s+1 \\ j^{sa}=j_s+j_{sa}-1}} \\ \sum_{\substack{() \\ (n_i=n)}} \sum_{\substack{n_i-j_s+1 \\ n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\substack{() \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}} \sum_{\substack{n_{sa}=n-j^{sa}+2 \\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \\ \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{\substack{n+j_{sa}-s \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}} \right. \\ \sum_{\substack{() \\ (n_i=n)}} \sum_{\substack{n_i-j_s+1 \\ n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\substack{() \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}} \sum_{\substack{n_{sa}=n-j^{sa}+2 \\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-s+1}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\ \right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\)}{}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{\)}{}} \\
& \sum_{(n_i=n)}^{\binom{\)}{}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{\)}{}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\binom{\)}{}} \\
& \frac{(n_i + 2 \cdot j_{ik} + j_{sa}^s + j_{sa} - j_s - j^{sa} - 2 \cdot j_{sa}^{ik} - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_{ik} + j_{sa}^s + j_{sa} - j_s - j^{sa} - 2 \cdot j_{sa}^{ik} - s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\)}{}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{\)}{}} \\
& \sum_{(n_i=n)}^{\binom{\)}{}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\)}{}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \right)
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i+j_{ik}+j_{sa}-j^{sa}-s-I-j_{sa}^{ik})!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot
\end{aligned}$$

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

$$\sum_{\substack{() \\ (n_i=n)}} \sum_{\substack{n_i-j_s+1 \\ n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik} - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{\substack{n-s+1 \\ j^{sa}=j_s+j_{sa}-1}} \\ \sum_{\substack{() \\ (n_i=n)}} \sum_{\substack{n_i-j_s+1 \\ n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\substack{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=\mathbf{n}-j^{sa}+2}} \\ \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{\substack{n+j_{sa}-s \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}} \right. \\ \sum_{\substack{() \\ (n_i=n)}} \sum_{\substack{n_i-j_s+1 \\ n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\substack{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=\mathbf{n}-j^{sa}+2}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(\begin{array}{c} n+j_{sa}^{ik}-s \\ n_{sa} \end{array}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\begin{array}{c} n_i-j_s+1 \\ n_{is} \end{array}\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\begin{array}{c} n-s+1 \\ n_{sa} \end{array}\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\begin{array}{c} n \\ n_{sa} \end{array}\right)} \\
& \sum_{(n_i=n)}^{\left(\begin{array}{c} n_i-j_s+1 \\ n_{is} \end{array}\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} - s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\begin{array}{c} n-s+1 \\ n_{sa} \end{array}\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\begin{array}{c} n \\ n_{sa} \end{array}\right)}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\ \right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\ }{}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{\ }{}} \\
& \sum_{(n_i=n)}^{\binom{\ }{}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{\ }{}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\binom{\ }{}} \\
& \frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} - s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\ }{}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{\ }{}} \\
& \sum_{(n_i=n)}^{\binom{\ }{}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\ }{}} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \left(\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - s)!} \right)_{j^{sa}} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - s - 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-s)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s + j_{sa} - j_{ik} - s - j_{sa}^s - 1)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z & = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s & + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - 2 \cdot j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - 2 \cdot j^{sa} - s - 2 \cdot j_{sa}^s + 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-s)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - j_{sa} - s + 1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - 2 \cdot j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - 2 \cdot j_{sa} - s + 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (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_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-s)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_s + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j^{sa} - s - j_{sa}^s + 1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j^{sa} + j_{sa}^s - j_s - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^s - j_s - j_{sa}^{ik} - s - 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}.
\end{aligned}$$

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_{ik} + j_{sa}^s + j_{sa} - j_s - 2 \cdot j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s + j_{sa} - j_s - 2 \cdot j_{sa}^{ik} - s - 1)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z & = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s & + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} & = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (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_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik} - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{sa} - s - j_{sa}^{ik} - 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-s)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_{sa}^{ik} - j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{sa}^{ik} - j_{sa} - s + 1)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 1 & \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{s}} \\ &\quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \right. \\ &\quad \left. \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \right. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-s+1} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}-s-\mathbb{k}_1-\mathbb{k}_2-1)!} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_i-n_{is}-1)!} \\
& \frac{(n_{is}-s-\mathbb{k}_1-\mathbb{k}_2-1)!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s-1)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-s+1}
\end{aligned}$$

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

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - s - \mathbb{k} - 1)!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
& \left. \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}.
\end{aligned}$$

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\ \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$\begin{aligned}
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{} \sum_{\substack{() \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}}^{n+j_{sa}-s} \right. \\
& \quad \sum_{\substack{() \\ (n_i=n)}}^{} \sum_{\substack{n_i-j_s+1 \\ n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}}^{} \sum_{\substack{() \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}}^{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{sa}=n-j^{sa}+2}} \sum_{\substack{() \\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{} \\
& \quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \quad \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik})}}^{\substack{n+j_{sa}^{ik}-s \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{\substack{() \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}}^{n+j_{sa}-s} \\
& \quad \sum_{\substack{() \\ (n_i=n)}}^{} \sum_{\substack{n_i-j_s+1 \\ n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}}^{} \sum_{\substack{() \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}}^{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{sa}=n-j^{sa}+2}} \sum_{\substack{() \\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{} \\
& \quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \quad \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{} \sum_{\substack{() \\ j^{sa}=j_s+j_{sa}-1}}^{n+j_{sa}-s} \\
& \quad \sum_{\substack{() \\ (n_i=n)}}^{} \sum_{\substack{n_i-j_s+1 \\ n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}}^{} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}^{} \sum_{\substack{() \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}
\end{aligned}$$

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

$$\frac{(n_{ik} + j_{ik} + \mathbb{k}_1 - j_s - s - \mathbb{k} - 1)!}{(n_{ik} + j_{ik} + \mathbb{k}_1 - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_s+j_{sa}-1} \frac{\binom{}{}}{\binom{}{}} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \right. \\ &\quad \left. \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \right. \\ &\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n+j_{sa}-s}$$

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}.
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

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

$$\frac{(2 \cdot n_{is} + j_s - n_{ik} - j_{ik} - s - 2 \cdot \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_{sa}=j_s+j_{sa}-1}^{\binom{n}{s}} \\ &\quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{n}{s}} \right. \\ &\quad \left. \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \right. \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_{sa} - j_{ik} - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \right. \\ &\quad \left. \frac{(\mathbf{n} - j_{sa})!}{(\mathbf{n} + j_{sa} - j_{sa} - s)! \cdot (s - j_{sa})!} \cdot \right. \\ &\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \\ &\quad \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!} + \right. \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\mathbf{n}\right)}$$

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

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_{ik}+1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{s}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\binom{n}{s}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} + j^{sa} - j_s - s - \mathbb{k}_2 - 2)!}{(n_{ik} + j^{sa} - \mathbf{n} - \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
& \left. \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} + j_{sa}^{ik} - s - \mathbb{k}_2 - j_{sa}^s - 1)!}{(n_{ik} + j^{sa} - \mathbf{n} - \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j^{sa} + 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} +
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \right)
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(2 \cdot n_{is} + j_s - n_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (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_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{n+j_{sa}-s} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \right. \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
\end{aligned}$$

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

$$\frac{(2 \cdot n_{is} + j_s + \mathbb{k}_2 - n_{ik} - j^{sa} - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s + \mathbb{k}_2 - n_{ik} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_s+j_{sa}-1} \frac{\binom{}{}}{\binom{}{}} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \right. \\ &\quad \left. \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \right. \\ &\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{n+j_{sa}-s}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{(\)}{n}} \\
& \sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{(\)}{n}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\binom{(\)}{n}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} + j_{sa} - s - j_{sa}^{s} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - j_{sa}^{s} - 1)! \cdot (\mathbf{n} + j_{sa} - s - j^{sa})!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{(\)}{n}} \\
\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
\frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} +
\end{aligned}$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

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

$$\frac{(2 \cdot n_{is} + j_s - n_{sa} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{s}} \\ &\quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{n}{s}} \right. \\ &\quad \left. \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right. \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \right. \\ &\quad \left. \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \right. \\ &\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \\ &\quad \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \right. \end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
\frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{s}} \\ &\quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{n}{s}} \right. \\ &\quad \left. \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right. \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}. \right. \\ &\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}. \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\mathbf{n}\right)}$$

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{ }{}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{ }{}} \\
& \sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{ }{}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

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

$$\frac{(n_{is} + n_{ik} + j_{ik} - n_{sa} - j^{sa} - s - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - 1)!}{(n_{is} + n_{ik} + j_s + j_{ik} - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{s}} \\ &\quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\binom{n}{s}} \right. \\ &\quad \left. \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right. \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \right. \\ &\quad \left. \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \right. \\ &\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \\ &\quad \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \right. \end{aligned}$$

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\left(\mathbf{n}+j_{sa}-s\right)} \\
& \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\mathbf{n}\right)} \\
& \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+n_{ik}+j_{ik}+\mathbb{k}_1-n_{sa}-j^{sa}-s-\mathbb{k}-1)!} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\mathbf{n}_i-n_{is}-1\right)!} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}+n_{ik}+j_{ik}+\mathbb{k}_1-n_{sa}-j^{sa}-\mathbf{n}-2 \cdot \mathbb{k}-j_{sa}^s-1)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!}{(n_{is}+n_{ik}+j_s+j_{ik}+\mathbb{k}_1-n_{sa}-j^{sa}-\mathbf{n}-2 \cdot \mathbb{k}-j_{sa}^s-1)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\mathbf{n}\right)}
\end{aligned}$$

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

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j^{sa}=j_{ik}+1}^{} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} + j_{ik} - j_s - s)!}{(n_{sa} + j_{ik} - \mathbf{n} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j^{sa}=j_s+j_{sa}-1}^{} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}.
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}.
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
& \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \right)
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1)! \cdot (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_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{n+j_{sa}-s} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \right) \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
\end{aligned}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\ \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!}.$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}.$$

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

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

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\binom{n}{n-j_{sa}}-s} \sum_{j^{sa}=j_{ik}+1}^{\binom{n}{n-j_{sa}}-s} \\
& \sum_{(n_i=n)}^{\binom{n}{n-j_s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n-j_{sa}}-s} \sum_{j^{sa}=j_{ik}+1}^{\binom{n}{n-j_{sa}}-s} \\
& \sum_{(n_i=n)}^{\binom{n}{n-j_s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{n-j_{sa}}-s} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\binom{n}{n-j_{sa}}-s} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)! \cdot (\mathbf{n}+j_{sa}-s-j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n-j_{sa}}-s} \sum_{j^{sa}=j_s+j_{sa}-1}^{\binom{n}{n-j_{sa}}-s} \\
\sum_{(n_i=n)}^{\binom{n}{n-j_s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge \\
\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j^{sa}=j_s+j_{sa}-1}^{} \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j^{sa}=j_{ik}+2}^{\mathbf{n}+j_{sa}-s} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\mathbf{n}+j_{sa}-s} \sum_{j^{sa}=j_{ik}+1}^{\mathbf{n}+j_{sa}-s} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{sa}-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{ik} + j_{ik} - n_{sa} - j_s - s - 2 \cdot \mathbb{k}_2 - 2)!}{(2 \cdot n_{ik} + j_{ik} - n_{sa} - \mathbf{n} - 2 \cdot \mathbb{k}_2 - j_{sa}^{s-1} - 2)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_l-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(\mathbf{n}-j_s-j_{sa}+1)!}{(\mathbf{n}-j_s-s+1) \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_l-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_l-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}.
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{ik} + j_{ik} + 2 \cdot \mathbb{k}_1 - n_{sa} - j_s - s - 2 \cdot \mathbb{k} - 2)!}{(2 \cdot n_{ik} + j_{ik} + 2 \cdot \mathbb{k}_1 - n_{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} - s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(\mathbf{n} - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_s+j_{sa}-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (\mathbf{n}-j^{sa})!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
\end{aligned}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j^{sa}=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \vdots \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} + n_{ik} + \mathbb{k}_1 - n_{sa} - s - 2 \cdot \mathbb{k} - 2)!}{(n_{is} + n_{ik} + j_s + \mathbb{k}_1 - n_{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^{s-2})! \cdot (\mathbf{n} + j_{sa}^{s-2} - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow
\end{aligned}$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot
\end{aligned}$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\left(\ \right)} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot
\end{aligned}$$

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

$$\frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^n \\
& \frac{(n_i-s-I)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}-s-1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(n+j_{sa}^{ik}-s\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}.$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n)} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-I-2 \cdot j_{sa}^s)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+2 \cdot j_s+j_{sa}^{ik}-j_{ik}-j_i-2 \cdot j_{sa}^s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
{}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\frac{n+j_{sa}^{ik}-s}{n}\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\frac{n_i-j_s+1}{n}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{\left(\frac{n_{is}+j_s-j_{ik}}{n_{ik}=n+\mathbb{k}-j_{ik}+2}\right)} \sum_{n_s=n-j_i+2}^{\left(\frac{n_{ik}+j_{ik}-j_i-\mathbb{k}}{n_s}\right)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\frac{n_i-j_s+1}{n}\right)} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)}^{\left(\frac{n_i-j_s+1}{n}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{\left(\frac{n_{is}+j_s-j_{ik}}{n_{ik}=n_{is}+j_s-j_{ik}}\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\left(\frac{n_{ik}+j_{ik}-j_i-\mathbb{k}}{n_s}\right)} \\
& \frac{(n_i + j_i + j_{sa}^s - j_s - 2 \cdot s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^s - j_s - 2 \cdot s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\frac{n+j_{sa}^{ik}-s}{n}\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
\sum_{(n_i=n)}^{\left(\frac{n_i-j_s+1}{n}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{\left(\frac{n_{is}+j_s-j_{ik}}{n_{ik}=n+\mathbb{k}-j_{ik}+2}\right)} \sum_{n_s=n-j_i+2}^{\left(\frac{n_{ik}+j_{ik}-j_i-\mathbb{k}}{n_s}\right)} \\
\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \\
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}
\end{aligned}$$

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\begin{array}{c} n \\ n+j_{sa}^{ik}-s \end{array}\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\begin{array}{c} n \\ n \end{array}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\begin{array}{c} n \\ n \end{array}\right)} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)}^{\left(\begin{array}{c} n \\ n \end{array}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\begin{array}{c} n \\ n+j_{sa}^{ik}-s \end{array}\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{\left(\begin{array}{c} n \\ n \end{array}\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}} \sum_{j_i=j_s+s-1} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\mathbf{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i+j_{ik}-j_i-I-j_{sa}^{ik})!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_{ik}-j_i-j_{sa}^{ik})!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \\
&\quad \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(n_i + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j_i}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ & \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ & \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ & \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(n_i-s-I)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}-s-1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+\mathbb{k}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+\mathbb{k}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_k}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - 2 \cdot j_{sa}^s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ &\quad \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\ &\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ &\quad \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\ &\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ &\quad \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ &\quad \frac{(n_i+j_i+j_{sa}^s+j_{sa}^{ik}-j_s-3 \cdot s-I+1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_i+j_{sa}^s+j_{sa}^{ik}-j_s-3 \cdot s+1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ & \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ & \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_k-\mathbb{k}-1} \\ & \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(n_i+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-I-1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1} \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(n_i+j_{ik}+j_{sa}^s-j_s-2 \cdot j_{sa}^{ik}-I-1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_{ik}+j_{sa}^s-j_s-2 \cdot j_{sa}^{ik}-1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1} \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\ & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ & \frac{(n_i-I-j_{sa}^{ik}-1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}-j_{sa}^{ik}-1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + j_{sa}^{ik} - 2 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{sa}^{ik} - 2 \cdot s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{s}} \\
&\quad \sum_{(n_i=n)}^{\binom{n}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \\
&\quad \sum_{(n_i=n)}^{\binom{n}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n}} \sum_{j_i=j_s+s-1}^{\binom{n}{n}} \\
&\quad \sum_{(n_i=n)}^{\binom{n}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{\binom{n}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{n}{n}} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+ j_{sa}^{ik} - s) \\ (j_{ik} = j_s + j_{sa}^{ik} - 1)}} \sum_{\substack{j_i = j_{ik} + s - j_{sa}^{ik} \\ (n_i = n) \quad n_{is} = n + \mathbb{k} - j_s + 2}} \\ &\quad \sum_{\substack{(n_{is} + j_s - j_{ik}) \\ (n_{ik} = n + \mathbb{k} - j_{ik} + 2)}} \sum_{\substack{n_{ik} + j_{ik} - j_i - \mathbb{k} \\ n_s = n - j_i + 2}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}. \end{aligned}$$

$$\begin{aligned} &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}. \\ &\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+ j_{sa}^{ik} - s) \\ (j_{ik} = j_s + j_{sa}^{ik} - 1)}} \sum_{\substack{n \\ j_i = j_{ik} + s - j_{sa}^{ik} + 1}} \\ &\quad \sum_{\substack{(n_i = n) \quad n_{is} = n + \mathbb{k} - j_s + 2}} \sum_{\substack{n_{is} + j_s - j_{ik} \\ (n_{ik} = n + \mathbb{k} - j_{ik} + 2)}} \sum_{\substack{n_{ik} + j_{ik} - j_i - \mathbb{k} \\ n_s = n - j_i + 2}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}. \end{aligned}$$

$$\begin{aligned} &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}. \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(\) \\ (j_{ik} = j_s + j_{sa}^{ik} - 1)}} \sum_{\substack{j_i = j_s + s - 1}} \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\ \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{ }{}} \sum_{j_i=j_s+s-1}^{\binom{ }{}}$$

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{ }{}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{ }{}}$$

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

$$\frac{(n_{ik} + j_{sa}^{ik} - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_{ik} - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_{z:z=1} \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\binom{ }{}}$$

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}}{}} \sum_{n_s=n-j_i+2}^{\binom{n_{ik}+j_{ik}-j_i-\mathbb{k}}{}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}.$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\binom{n}{}}$$

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}}{}} \sum_{n_s=n-j_i+2}^{\binom{n_{ik}+j_{ik}-j_i-\mathbb{k}}{}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s-1}} \sum_{j_i=j_{ik}+1}^{\binom{n-1}{s}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n-1}{s}} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+1}^{\binom{n-1}{s-1}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_s-j_{ik})}^{\binom{n}{s-1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}^{n_{is}+j_s-j_{ik}}$$

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

$$\frac{(n_{ik} + j_i - j_s - s - k - 2)!}{(n_{ik} + j_i - \mathbf{n} - k - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n-1}{s-1}} \sum_{j_i=j_{ik}+1}^{\binom{n-1}{s}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_i-k+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n-1}{s-1}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{()} \\
& \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot
\end{aligned}$$

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

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

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n-1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{is} + j_s - n_{ik} - j_i - s - \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_i - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}.
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{n_{is}+j_s-j_{ik}} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
& \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
& \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{n-j_s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{n-j_i}} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{n-j_s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+j_s-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\left(\right)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.
\end{aligned}$$

$$\frac{(n_{is} + n_{ik} + j_{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(n_{is} + n_{ik} + j_s + j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+s-2) \\ (n_i=n)}}^{\substack{(n-1) \\ (n_{is}=n+\mathbb{k}-j_s+2)}} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1} \cdot$$

$$\sum_{(n_i=n)}^{\substack{() \\ (n_i-j_s+1)}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_{is}+j_s-j_{ik}} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}+2}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \cdot$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+s-2) \\ (n_i=n)}}^{\substack{(n-1) \\ (n_{is}=n+\mathbb{k}-j_s+2)}} \sum_{j_i=j_{ik}+2}^n \cdot$$

$$\sum_{(n_i=n)}^{\substack{() \\ (n_i-j_s+1)}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_{is}+j_s-j_{ik}} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}+2}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \cdot$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{n-s+1 \\ ()}} \sum_{j_i=j_{ik}+1}^n \cdot$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n}-1)} \sum_{j_i=j_{ik}+1}^{n_{ik}-\mathbb{k}-1} \\ \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n}-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^{\left(n\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+2}^{\left(n\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{(\)}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - \mathbf{n} - 2 \cdot \mathbb{k} - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-1}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n-1}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-1}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{\mathbf{n}}{s-1}} \sum_{j_i=j_{ik}+1}^{\binom{\mathbf{n}}{s-1}} \\
& \sum_{(n_i=n)}^{\binom{\mathbf{n}}{s-1}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

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

$$\begin{aligned}
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{\mathbf{n}}{s-1}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\binom{\mathbf{n}}{s-1}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\mathbf{n}}{s}} \sum_{j_i=j_{ik}+1}^{\binom{\mathbf{n}}{s}} \\
& \sum_{(n_i=n)}^{\binom{\mathbf{n}}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_s-j_{ik})}^{\binom{\mathbf{n}}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{\mathbf{n}}{s}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{ik} + j_{ik} - n_s - j_s - s - 2 \cdot \mathbb{k} - 2)!}{(2 \cdot n_{ik} + j_{ik} - n_s - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{POS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{\mathbf{n}}{s-1}} \sum_{j_i=j_{ik}+1}^{\binom{\mathbf{n}}{s-1}} \\
& \sum_{(n_i=n)}^{\binom{\mathbf{n}}{s-1}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_i+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{\mathbf{n}}{s-1}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}
\end{aligned}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!}.$$

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

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

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{(\)}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n+j_{sa}^{ik}-s)}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!}.$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!}.$$

$$\begin{aligned}
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j_i}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}
\end{aligned}$$

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

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
&\quad \left(\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \right. \\
&\quad \left. \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \right. \\
&\quad \left. \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \right. \\
&\quad \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\quad \left(\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \right. \\
&\quad \left. \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \right. \\
&\quad \left. \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \right. \\
&\quad \left. \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \right. \\
&\quad \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j_i=j_s+s-1}^{\infty} \\
&\quad \left(\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\infty} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\infty} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}+j_{sa}^{ik}-s} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -
\end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{n}{s}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - I - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{s}}$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

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

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_s+s-1}^{()}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + j_i + j_{sa}^s - j_s - 2 \cdot s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^s - j_s - 2 \cdot s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}^{ik}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{()}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{(n_i+j_{ik}-j_i-\mathbb{k})} \sum_{(i=2)}^{(n-j_i+1)}$$

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

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}^{ik}-s) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\left(\right)} \\
& \frac{(n_i+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s-I)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!}
\end{aligned}$$

$$\begin{aligned}
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{n}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{(n_i=n)}^{\binom{n}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n}} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)}^{\binom{n}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_i+j_s-j_{ik})}^{\binom{n}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{n} \\
& \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{n}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{\binom{n}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}
\end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}.$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ \sum_{(n_i=n)}^() \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^() \sum_{j_i=j_s+s-1}^n$$

$$\sum_{(n_i=n)}^() \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^() \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{((n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!) + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!}} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{((n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!) + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!}} \right) - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\mathbf{n}\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}
\end{aligned}$$

$$\frac{(n_i + 2 \cdot j_{ik} + j_{sa}^s - j_s - j_i - 2 \cdot j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_{ik} + j_{sa}^s - j_s - j_i - 2 \cdot j_{sa}^{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n+j_{sa}^{ik}-s)}} \sum_{\substack{j_i=j_{ik}+s-j_{sa}^{ik}}}^{\substack{(n-j_i+1)}} \\ &\quad \sum_{(n_i=n)}^{\substack{()}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n+j_{sa}^{ik}-s)}} \sum_{\substack{j_i=j_{ik}+s-j_{sa}^{ik}+1}}^{\substack{n}} \\ &\quad \sum_{(n_i=n)}^{\substack{()}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{ }{}} \sum_{j_i=j_s+s-1}^{\binom{ }{}}$$

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{ }{}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{ }{}}$$

$$\frac{(n_i + j_{ik} - j_i - I - j_{sa}^{ik})!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} - j_i - j_{sa}^{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{}}$$

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_i+j_s-j_{ik}}{}} \sum_{n_s=n-j_i+2}^{\binom{n_{ik}+j_{ik}-j_i-\mathbb{k}}{}} \sum_{(i=2)}^{\binom{n-j_i+1}{}}$$

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

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\binom{n}{}}$$

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_i+j_s-j_{ik}}{}} \sum_{n_s=n-j_i+2}^{\binom{n_{ik}+j_{ik}-j_i-\mathbb{k}}{}} \sum_{(i=2)}^{\binom{n-j_i+1}{}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j_i=j_s+s-1}^{\infty}$$

$$\sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\infty} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{POS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_{ik}+1}^{\infty}$$

$$\sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{(\)}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{(\)}{n}}$$

$$\left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j_i}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(n-1)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(n-1)}{n}} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!}.$$

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

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

$$\left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) -$$

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{n_i-j_s+1}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i-s-I)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}-s-1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^1$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!}.$$

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

$$\left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) +$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n-1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^n \\
& \frac{(n_i+j_s-j_{ik}-I-j_{sa}^s-1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_s-j_{ik}-j_{sa}^s-1)!}
\end{aligned}$$

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - 2 \cdot j_{sa}^s + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.
\end{aligned}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n-1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_{ik}+1}^{} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{} \\
& \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n-1} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n-1} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(n_i+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-I-1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n-i+1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{()}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - I - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i - i + 1)!} \right) - \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^n \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n}-1)} \sum_{j_i=j_{ik}+1}^{n-j_i+1} \\ \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n}-1)} \sum_{j_i=j_{ik}+2}^n \\ \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}.$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{()}} \sum_{j_i=j_s+s-1}^{\binom{(\)}{()}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{()}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{(\)}{()}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{(\)}{()}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n-1}{(n-1)}} \sum_{j_i=j_{ik}+1}^{\binom{n-1}{(n-1)}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{()}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}}{(n_{is}+j_s-j_{ik})}} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{\binom{n-j_i+1}{(n-j_i+1)}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n-1}{(n-1)}} \sum_{j_i=j_{ik}+2}^n$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right.\left.\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
& \frac{(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right.\left.\right)} j_i=j_{ik}+1}{\sum_{(n_i=n)}^{\left(\right.\left.\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right.\left.\right)} n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-s-\mathbb{k}-1)!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s-1)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right.\left.\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

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

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{n_i-j_s+1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

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

$$\frac{(n_{ik} + j_{sa}^{ik} - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_{ik} - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n+j_{sa}^{ik}-s)}} \sum_{\substack{j_i=j_{ik}+s-j_{sa}^{ik}}}^{\substack{(n_{ik}+j_{ik}-j_i-\mathbb{k})(n-j_i+1)}} \\ &\quad \sum_{(n_i=n)}^{\substack{()}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!}. \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_{ik}=j_s+j_{sa}^{ik}-1)}}^{\substack{(n+j_{sa}^{ik}-s)}} \sum_{\substack{j_i=j_{ik}+s-j_{sa}^{ik}+1}}^{\substack{n}} \\ &\quad \sum_{(n_i=n)}^{\substack{()}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}. \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{is} + j_s - n_{ik} - j_{ik} - s - \mathbb{k} - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_{ik} - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^{\left(n\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+2}^{\left(n\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{(\)}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$\frac{(n_{ik} + j_i - j_s - s - \mathbb{k} - 2)!}{(n_{ik} + j_i - \mathbf{n} - \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-1}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n-1}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-1}} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n-s+1}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n-s+1}} \\
& \sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{(\)}{n_i-j_s+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{(\)}{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_{ik} + j_{sa}^{ik} - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_i - \mathbf{n} - \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_i + 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-s+1}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n-1}} \\
& \sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!}
\end{aligned}$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}} \sum_{j_i=j_s+s-1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\mathbf{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{((n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!) + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!}} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}+j_{sa}^{ik}-s\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
&\quad \left(\frac{(n_s-2)!}{((n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!) + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!}} \right) - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\mathbf{n}\right)} \sum_{j_i=j_s+s-1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\mathbf{n}\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\mathbf{n}\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${ }^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_{ik} = j_s + j_{sa}^{ik} - 1)}}^{\substack{(n + j_{sa}^{ik} - s)}} \sum_{\substack{j_i = j_{ik} + s - j_{sa}^{ik}}}^{\substack{(n + j_{sa}^{ik} - s)}}$$

$$\sum_{\substack{(n_i=n)}}^{\substack{()}} \sum_{\substack{n_{is}=n+\mathbb{k}-j_s+2}}^{\substack{n_i-j_s+1}} \sum_{\substack{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}}^{\substack{(n_{is}+j_s-j_{ik})}} \sum_{\substack{n_s=n-j_i+2}}^{\substack{n_{ik}+j_{ik}-j_i-\mathbb{k}}} \sum_{\substack{(i=2)}}^{\substack{(n-j_i+1)}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}.$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n_{ik} = j_s + j_{sa}^{ik} - 1)}}^{\substack{(n + j_{sa}^{ik} - s)}} \sum_{\substack{j_i = j_{ik} + s - j_{sa}^{ik} + 1}}^{\substack{n}}$$

$$\sum_{\substack{(n_i=n)}}^{\substack{()}} \sum_{\substack{n_{is}=n+\mathbb{k}-j_s+2}}^{\substack{n_i-j_s+1}} \sum_{\substack{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}}^{\substack{(n_{is}+j_s-j_{ik})}} \sum_{\substack{n_s=n-j_i+2}}^{\substack{n_{ik}+j_{ik}-j_i-\mathbb{k}}} \sum_{\substack{(i=2)}}^{\substack{(n-j_i+1)}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(\) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_s+s-1}^{(\)}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}.$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(\) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n+j_{sa}^{ik}-s)}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{(n_{is}+j_s-j_{ik})} \sum_{(i=2)}^{n_{ik}+j_{ik}-j_i-\mathbb{k} (n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}.$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(\) \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{(n_{is}+j_s-j_{ik})} \sum_{(i=2)}^{n_{ik}+j_{ik}-j_i-\mathbb{k} (n-j_i+1)}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{}{}} \sum_{j_i=j_s+s-1}^{\binom{}{}} \\
& \sum_{(n_i=n)}^{\binom{}{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{}{}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{}{}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^{is} - 1)! \cdot (\mathbf{n} + j_{sa}^{is} - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{}{}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\binom{n+j_{sa}^{ik}-s}{}} \\
& \sum_{(n_i=n)}^{\binom{}{}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{n_{is}+j_s-j_{ik}} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{n+j_{sa}^{ik}-s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{\binom{n}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}
\end{aligned}$$

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

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

$$\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ \sum_{(n_i=n)}^() \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^() \sum_{j_i=j_s+s-1}^n$$

$$\sum_{(n_i=n)}^() \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^() \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$\frac{(n_{is} + n_{ik} + j_{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(n_{is} + n_{ik} + j_s + j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n-1}$$

$$\sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{n-1}$$

$$\sum_{(n_i=n)}^{(\)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^{\left(n\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}\right)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}\right)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n}} \\ \sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{(\)}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{(\)}{n}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(2 \cdot n_{is} + j_s - n_s - j_{ik} - s - 2 \cdot \mathbb{k} - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-1}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n-1}} \\ \sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-1}} \sum_{j_i=j_{ik}+2}^n \\ \sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n-s+1}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n-s+1}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n-s+1}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{\binom{(\)}{n-s+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{\binom{(\)}{n-s+1}}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - \mathbf{n} - 2 \cdot \mathbb{k} - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n-s+1}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n-s+1}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n-s+1}} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{\binom{(\)}{n-s+1}} \sum_{n_s=n-j_i+2}^{(n_{is}+j_s-j_{ik})} \sum_{(i=2)}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n-1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^n \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 2 \cdot \mathbb{k} - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\ \left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j_i}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\ \left. \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}$$

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

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
& \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2-1)!}{(n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-1)! \cdot (\mathbf{n}-s-1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
& \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\binom{n}{s}} \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s - j_i - j_{sa}^s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \sum_{n_s=n-j_i+2}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right)
\end{aligned}$$

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - 2 \cdot j_{sa}^s - 1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}} \sum_{j_i=j_s+s-1}^{} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

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

$$\frac{(n_i + j_i + j_{sa}^s - j_s - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_i + j_{sa}^s - j_s - 2 \cdot s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_s+s-1}^{()} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{\substack{(n+j_{sa}^{ik}-s) \\ (j_{ik}=j_s+j_{sa}^{ik})}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right) \end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s-I)!}{(n_i-\mathbf{n}-I)! \cdot (n+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s)!}
\end{aligned}$$

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
& \quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \quad \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
& \quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \quad \left. \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^n \\
& \quad \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^n \\
& \quad \frac{(n_i+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s-\mathbb{k}_1-\mathbb{k}_2-1)!}{(n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-1)! \cdot (\mathbf{n}+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s)!}
\end{aligned}$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \sum_{n_s=\mathbf{n}-j_i+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.
\end{aligned}$$

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{n}} \sum_{j_i=j_s+s-1}^{\mathbf{n}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_s+s-1}^{} \\ \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \Big) \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\mathbf{n}} \\
& \frac{(n_i+j_{ik}+j_{sa}^s-j_s-j_{sa}^{ik}-s-\mathbb{k}_1-\mathbb{k}_2-1)!}{(n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-1)! \cdot (\mathbf{n}+j_{ik}+j_{sa}^s-j_s-j_{sa}^{ik}-s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i + 2 \cdot j_{ik} + j_{sa}^s - j_s - j_{sa}^a - 2 \cdot j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_{ik} + j_{sa}^s - j_s - j_{sa}^a - 2 \cdot j_{sa}^{ik})!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\binom{n}{s}} \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
\end{aligned}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-n-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \sum_{n_s=n-j_i+2}^n \right. \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right. \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
 \end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik} - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{ik} - j_i - j_{sa}^{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_z > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

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

$$\frac{(n_i + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+s-2)}} \sum_{\substack{() \\ (j_i=j_s+s-1)}} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+s-2)}} \sum_{j_i=j_{ik}+2}^n \right. \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &\quad \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+s-1)}} \sum_{j_i=j_{ik}+1}^n \end{aligned}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!}.$$

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

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

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j_i}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$\begin{aligned}
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \Big) - \\
& (D-s)! \cdot \sum_{j_{ik}=j_s+j_{sa}-1}^{n-s+1} \sum_{(j_i=j_{ik}+1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left(\frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2-1)!}{(n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-1)! \cdot (\mathbf{n}-s)!} \right)_{j_i}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\binom{n_{is}+j_s-j_{ik}-\mathbb{k}_1}{s}} \sum_{n_s=n-j_i+2}^{\binom{n_{ik}-\mathbb{k}_2-1}{s}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

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

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
 \end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_s - j_{ik} - I - j_{sa}^s - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s - j_{ik} - j_{sa}^s - 1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{POS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^n \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - n - I)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - 2 \cdot j_{sa}^s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\ & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\ \right)} \sum_{j_i=j_{ik}+1}^{\left(\ \right)} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_i+2 \cdot j_s+j_{sa}^{ik}-2 \cdot j_i-\mathbb{k}_1-\mathbb{k}_2-2 \cdot j_{sa}^s)!} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\ \right)} \\
& \frac{(n_i+2 \cdot j_s+j_{sa}^{ik}-2 \cdot j_i-\mathbb{k}_1-\mathbb{k}_2-2 \cdot j_{sa}^s)!}{(n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-1)! \cdot (\mathbf{n}+2 \cdot j_s+j_{sa}^{ik}-2 \cdot j_i-2 \cdot j_{sa}^s+1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\ \right)} \sum_{j_i=j_s+s-1}^{\left(\ \right)} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i+j_{ik}+j_{sa}^s-j_s-2 \cdot s-I+1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_{ik}+j_{sa}^s-j_s-2 \cdot s+1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{\)}{}} \sum_{j_i=j_s+s-1}^{\binom{\)}{}} \\
& \sum_{(n_i=n)}^{\binom{\)}{}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 &\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 &\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
 \end{aligned}$$

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \end{aligned}$$

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

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^n \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_i - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_i - s - j_{sa}^s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\ \right)} \sum_{j_i=j_{ik}+1}^{\left(\ \right)} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_i+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-I-1)!} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-I-1)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-1)!}
\end{aligned}$$

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge$

$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\ \right)} \sum_{j_i=j_s+s-1}^{\left(\ \right)} \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^n \\
& \frac{(n_i+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-\mathbb{k}_1-\mathbb{k}_2-2)!}{(n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-1)! \cdot (\mathbf{n}+j_i+j_{sa}^s-j_s-j_{sa}^{ik}-s-1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.
\end{aligned}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - I - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{()}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - \mathbb{k}_1 - \mathbb{k}_2 - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
 \end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i - I - j_{sa}^{ik} - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - j_{sa}^{ik} - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \end{aligned}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^n \\
& \quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+s-2)}} \sum_{j_i=j_s+s-1}^{n-s+1} \\ & \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+s-2)}} \sum_{j_i=j_{ik}+2}^n \right. \\ & \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_s+s-1}^{} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\binom{n}{s}} \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\binom{n+j_{sa}^{ik}-s}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& (D-s)! \cdot \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n-s+1} \sum_{(j_i=j_{ik}+1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^n \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - s - \mathbb{k} - 1)!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j_i=j_s+s-1}^{\infty} \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\infty} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\infty} \right. \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \sum_{n_s=n-j_i+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
\end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(n_{ik} + j_{sa}^{ik} + \mathbb{k}_1 - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_{ik} + \mathbb{k}_1 - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

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

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(2 \cdot n_{is} + j_s + \mathbb{k}_2 - n_{ik} - j_{ik} - s - 2 \cdot \mathbb{k} - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s + \mathbb{k}_2 - n_{ik} - j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

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

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_s+s-1}^n$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\ \right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\ \right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\ \right)} \sum_{j_i=j_{ik}+1}^n
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} + j_{sa}^{ik} + \mathbb{k}_1 - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_i + \mathbb{k}_1 - \mathbf{n} - \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_i + 1)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{pos} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{} \sum_{j_i=j_s+s-1}^{} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+s-2)}^{} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_s+s-1}^n$$

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

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(2 \cdot n_{is} + j_s + \mathbb{k}_2 - n_{ik} - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s + \mathbb{k}_2 - n_{ik} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
& \sum_{(n_i=n)}^{(\)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\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_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^n
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \right)
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
{}^0 S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \sum_{n_s=\mathbf{n}-j_i+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\left(\right)} \sum_{n_s=n-j_i+2}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \quad n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right)
\end{aligned}$$

$$\begin{aligned}
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} + n_{ik} + j_{ik} - n_s - j_i - s - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - 1)!}{(n_{is} + n_{ik} + j_s + j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
 D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
 \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
 {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
\end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) -
\end{aligned}$$

$$\begin{aligned}
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+1}^{\binom{n}{s}} \\
 & \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\binom{n}{s}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_{ik} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_{ik} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (n - s)!} \\
 D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
 \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_z > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
 s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
 0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
 \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+2}^n \right. \\
 \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right).
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
 \end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) -
\end{aligned}$$

$$\begin{aligned}
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+1}^{\binom{n}{s}} \\
 & \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\binom{n}{s}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)! \cdot (n + j_{sa}^s - s - j_s)!} \\
 D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
 \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_z > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
 s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
 {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
 & \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\
 & \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}. \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{()} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow
\end{aligned}$$

$$\begin{aligned}
 {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) -
 \end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(2 \cdot n_{ik} + j_{ik} - n_s - j_s - s - 2 \cdot \mathbb{k}_2 - 2)!}{(2 \cdot n_{ik} + j_{ik} - n_s - \mathbf{n} - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) -
\end{aligned}$$

$$\begin{aligned}
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+1}^{\binom{n}{s}} \\
 & \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{n}{s}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\binom{n}{s}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} + n_{ik} - n_s - s - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - 2)!}{(n_{is} + n_{ik} + j_s - n_s - \mathbf{n} - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
 D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
 \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
 I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
 s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
 {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
 & \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\
 & \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right).
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^n$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j_i}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!} \cdot
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{(\)} \\ \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{(n_i-s-\mathbb{k}_1-1)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\ \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{(n_i-s-\mathbb{k}_1-1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_l)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{(\)}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s - j_i - j_{sa}^s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-n-j_{sa}^{ik}+1}^n \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}}
\end{aligned}$$

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

$$\left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) -$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!}.
\end{aligned}$$

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

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{n_i+j_{sa}-j_s-2 \cdot s-I) !}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_i+j_{sa}-j_s-2 \cdot s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{n_i-j_s+1} \\ & \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!} \cdot \\ & \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) + \\ & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ & \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_i+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{\left(n-j_i+1\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
& \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \right)
\end{aligned}$$

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

$$\left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) -$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!}.
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{ }{}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}}$$

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n)}^{\binom{ }{}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{ }{}} \sum_{j_i=j_s+s-1}^{\mathbf{n}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{n_i-j_s+1}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{n-s+1}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(i=2)}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(i=2)}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n)} \sum_{j_i=j_s+s-1}^n$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_i+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{\left(n-j_i+1\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!}.
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\mathbf{n}}{n}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}}$$

$$\sum_{(n_i=n)}^{\binom{\mathbf{n}}{n}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n)}^{\binom{\mathbf{n}}{n}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{\mathbf{n}}{n}} \sum_{j_i=j_s+s-1}^{\binom{\mathbf{n}}{n}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{n-s+1} \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{n_i+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)} \sum_{n_s=n-j_i+2}^{n_i+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n)} \sum_{j_i=j_s+s-1}^n$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^{ik} - j_{ik} - 2 \cdot s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ & \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_i+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}. \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_s+s-1}^{\binom{n}{s}} \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
& \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\binom{n}{s-1}} \sum_{j_i=j_{ik}+1}^n \right)
\end{aligned}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!}.$$

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

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

$$\left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) -$$

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

$$\left(\frac{(n_i-s-I)!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}-s)!} \right)_{j_i}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n_s)} \sum_{j_i=j_s+s-1}^{(n_i)}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

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

$$\sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{(\)} \\ \left(\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - s)!} \right)_{j_i}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)} \\ \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\ \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(\mathbf{n}-1)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n})} \sum_{j_i=j_{ik}+1}^{\mathbf{n}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\mathbf{n})} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{n_i-s+1} \frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n})} \sum_{j_i=j_s+s-1}^{\mathbf{n}}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n})} \sum_{j_l=j_{ik}+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(\mathbf{n}-1)} \sum_{j_l=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_s+s-1}^{\infty} \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_{ik}+2}^{\infty} \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_t=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_s - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s - j_{ik} - j_{sa}^s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_t=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_t=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
0S_D^{POS} = & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{ }{ }} \sum_{j_i=j_{ik}+1}^{\binom{ }{ }} \\
& \sum_{(n_i=n)}^{\binom{ }{ }} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{ }{ }} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\binom{ }{ }} \\
& \frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot s + 1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{ }{ }} \sum_{j_i=j_s+s-1}^{\binom{ }{ }} \\
& \sum_{(n_i=n)}^{\binom{ }{ }} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

$$\frac{(n_i + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_i+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -
\end{aligned}$$

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{\left(n-j_i+1\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{\left(n-j_i+1\right)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_s+s-1}^{\infty} \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_{ik}+2}^{\infty} \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.
\end{aligned}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\mathbf{(n-1)}} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\mathbf{(n)}} \sum_{j_i=j_{ik}+1}^{j_{sa}^{ik}}$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\mathbf{(n)}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_i + j_{sa}^s - j_s - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_i + j_{sa}^s - j_s - j_{sa}^{ik} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_s+s-1}^{\infty} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.
\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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - I - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge \mathbf{I} = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge \mathbf{I} = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - I - j_{sa}^{ik} - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - j_{sa}^{ik} - 1)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

$$\frac{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik} - 2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - j_{sa}^{ik} - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_i+s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right. \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{n}{s}} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)}^{\binom{n}{s}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -
\end{aligned}$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

$$\frac{(n_i + j_{sa}^{ik} - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{sa}^{ik} - 2 \cdot s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \right). \end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
&\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right. \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{}{}} \sum_{j_i=j_s+s-1}^{\binom{}{}} \\
& \sum_{(n_i=n)}^{\binom{}{}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_t=j_{ik}+2}^{\mathbf{n}}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_t=j_{ik}+1}^{\mathbf{n}}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_t=j_{ik}+1}^{\mathbf{n}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\sum_{n_i=n}^{n_i-j_s+1})} \sum_{j_i=j_s+s-1}^{(n_i-n_{is}-1)!} \cdot$$

$$\sum_{(n_i=n)}^(\sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1}\sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)})$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\sum_{n_i=n}^{n_i-j_s+1})} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^(\sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1}\sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}) \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^n$$

$$\sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{()}$$

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

$$\frac{(n_{is} - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_s+s-1}^{} \\
 & \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{} \sum_{n_s=n-j_i+2}^n \right. \\
 & \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 & \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} .
 \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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} + j_{ik} - j_s - s - \mathbb{k}_2 - 1)!}{(n_{ik} + j_{ik} - \mathbf{n} - \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z & = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

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

$$\frac{(n_{ik} + j_{ik} + \mathbb{k}_1 - j_s - s - \mathbb{k} - 1)!}{(n_{ik} + j_{ik} + \mathbb{k}_1 - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{\mathbf{n}} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{((n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!) + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!}} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}.
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0 S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_s+s-1}^{} \\
&\quad \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{} \sum_{n_s=n-j_i+2}^{} \right. \\
&\quad \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{} \sum_{n_s=n-j_i+2}^{} \right. \\
&\quad \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot
\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_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} + j_{sa}^{ik} + \mathbb{k}_1 - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_{ik} + \mathbb{k}_1 - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_{ik})!} \\
D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
{}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

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

$$\frac{(2 \cdot n_{is} + j_s - n_{ik} - j_{ik} - s - 2 \cdot \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{(\)} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{((n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!) + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!}} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{(\)} \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \right. \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \right. \\
&\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \right)
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{} \sum_{j_i=j_s+s-1}^{} \\
 & \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{} \sum_{j_i=j_{ik}+2}^n \\
 & \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(n_{ik} + j_i - j_s - s - \mathbb{k}_2 - 2)!}{(n_{ik} + j_i - \mathbf{n} - \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{\left(n-j_i+1\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^n$$

$$\begin{aligned}
& \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n})} \sum_{j_l=j_{ik}+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(\mathbf{n}-1)} \sum_{j_l=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{(\)}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\binom{(\)}{n}}$$

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

$$\frac{(n_{ik} + j_{sa}^{ik} + \mathbb{k}_1 - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_i + \mathbb{k}_1 - \mathbf{n} - \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_i + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n}} \sum_{j_i=j_s+s-1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{\binom{(\)}{n}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{\binom{(\)}{n}}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}
\end{aligned}$$

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

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0 S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_s+s-1}^{} \\
&\quad \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{} \sum_{n_s=n-j_i+2}^{} \right. \\
&\quad \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{} \sum_{n_s=n-j_i+2}^{} \\
&\quad \sum_{(n_i=n)}^{} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.
\end{aligned}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)} \sum_{(i=2)}^{\left(n-j_i+1\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

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

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

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{(\)} \\
&\quad \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{((n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!) + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!}} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{(\)} \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \right. \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \right. \\
&\quad \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \right)
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_l)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^n$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^n$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^n$$

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

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow \\
& {}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
& \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-n-j_{sa}^{ik}+1}^{\mathbf{n}} \right)
\end{aligned}$$

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

$$\frac{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_s - j_i - s - 2 \cdot \mathbb{k}_2 - 1)!}{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_s+s-1}^{()} \\ & \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\ & \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ & \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\ & \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) \right) \end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\left(\right)}$$

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

$$\frac{(n_{is} + n_{ik} + j_{ik} - n_s - j_i - s - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - 1)!}{(n_{is} + n_{ik} + j_s + j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)}$$

$$\sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{\left(n_{is}+j_s-j_{ik}-\mathbb{k}_1\right)} \sum_{n_s=n-j_i+2}^{\left(n_{ik}+j_{ik}-j_i-\mathbb{k}_2\right)} \sum_{(i=2)}^{\left(n-j_i+1\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

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

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

$$\frac{(n_{is} + n_{ik} + j_{ik} + \mathbb{k}_1 - n_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(n_{is} + n_{ik} + j_s + j_{ik} + \mathbb{k}_1 - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^{\left(\right)} \right. \\ &\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{n_s} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_s+j_{ik}-j_s-s)!}{(n_s+j_{ik}-\mathbf{n}-j_{sa})! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \\
D = \mathbf{n} & < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
\mathbb{k}_z: z & = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
I = \mathbb{k} & + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
s = s + \mathbb{k} & + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
{}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} & \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^n
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n})} \sum_{j_l=j_{ik}+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(\mathbf{n}-1)} \sum_{j_l=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{(\)}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\binom{(\)}{n}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n}} \sum_{j_i=j_s+s-1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{\binom{(\)}{n}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{\binom{(\)}{n}}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{()}{()}} \sum_{j_i=j_s+s-1}^{\binom{()}{()}} \\
& \sum_{(n_i=n)}^{\binom{()}{()}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_s+s-1}^{\infty}$$

$$\sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\infty} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}$$

$$\sum_{(n_i=n)}^{\infty} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-\mathbf{n}-2)! \cdot (\mathbf{n}-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{()} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s+1 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee \\
& I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \\
& s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow \\
& {}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{n-s+1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n})} \sum_{j_l=j_{ik}+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(\mathbf{n}-1)} \sum_{j_l=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{\binom{(\)}{n}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{\binom{(\)}{n}}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0 S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n}} \sum_{j_i=j_s+s-1}^{\binom{(\)}{n}}$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{\binom{(\)}{n}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{(\)}{n}} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right)$$

$$\sum_{(n_i=n)}^{\binom{(\)}{n}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{\binom{(\)}{n}}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(\mathbf{n}-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\
& \sum_{(n_i=n)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!} \\
& D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee
\end{aligned}$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_s+s-1}^{\left(\right)} \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\left(\right)} \sum_{j_i=j_{ik}+2}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{\left(n-1\right)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n)}^{\left(\right)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
{}^0S_D^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{\binom{()}{()}} \sum_{j_i=j_s+s-1}^{\binom{()}{()}} \\
& \sum_{(n_i=n)}^{\binom{()}{()}} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_D^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+s-2) \\ (n_i=n)}} \sum_{j_i=j_s+s-1}^n$$

$$\sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2)}} \sum_{\substack{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}} \sum_{\substack{n_{ik}-\mathbb{k}_2-1 \\ n_s=n-j_i+2}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\substack{(j_{ik}=j_s+s-2) \\ (n_i=n)}} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2)}} \sum_{\substack{(n_{is}+j_s-j_{ik}-\mathbb{k}_1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}} \sum_{\substack{n_{ik}+j_{ik}-j_i-\mathbb{k}_2 \\ n_s=n-j_i+2}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}.$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s+1 \wedge j_{ik} = j_i-1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s+\mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i-1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i-1 \Rightarrow$

$${}^0S_D^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^n$$

$$\begin{aligned}
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\mathbf{n})} \sum_{j_l=j_{ik}+2}^{\mathbf{n}} \right. \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(\mathbf{n}-1)} \sum_{j_l=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=n)}^{} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(\mathbf{n}-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\substack{() \\ (j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j_i=j_{ik}+1}^{()}$$

$$\sum_{\substack{() \\ (n_i=n)}} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

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

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

Güldün

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z > 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_D^{DOS} = & (D - s) \cdot \prod_{z=2}^s \sum_{((j_i)_1=2)}^{\left((j_{ik})_3-1\right)} \sum_{(j_{ik})_z=z}^{(j_i)_z-1} \sum_{((j_i)_z=z+1 \vee z=s \Rightarrow s+1)}^{\left((j_{ik})_{z+2}-1 \vee \mathbf{n}\right)} \\
& \sum_{n_i=n}^{\left((n_{ik})_1=(n_s)_2+(j_i)_2+\sum_{i=1} \mathbb{k}_i-(j_i)_1 \vee z=s \Rightarrow \mathbf{n}+\sum_{i=1}^{s-1} \mathbb{k}_i-(j_i)_1+2\right)} \sum_{(n_{ik})_z=(n_s)_z+(j_i)_z+\sum_{i=z-1} \mathbb{k}_i-(j_i)_z \vee z=s \Rightarrow \mathbf{n}+\sum_{i=z-1}^{s-1} \mathbb{k}_i-(j_{ik})_z+2}^{(n-(j_i)_1+1)} \\
& \sum_{\left((n_s)_z=(n_s)_{z+1}+(j_i)_{z+1}+\sum_{i=z} \mathbb{k}_i-(j_i)_z \vee z=s \Rightarrow \mathbf{n}+\sum_{i=z}^{s-1} \mathbb{k}_i-(j_i)_z+2\right)}^{\left((n_{ik})_{z-1}+(j_{ik})_{z-1}-(j_{ik})_z-\sum_{i=z-2} \mathbb{k}_i\right)} \\
& \frac{(D-s)!}{(D-s-(j_i)_1+2)!} \cdot \frac{\left(D-s-\left(j_{ik}-j_{sa}^{ik}\right)_z\right)!}{\left(D-s-(j_i)_z+(j_{ik})_z-\left(j_{ik}-j_{sa}^{ik}\right)_z+1\right)!} \cdot \frac{(D-(j_i)_{z=s})!}{(D-\mathbf{n})!} \cdot \\
& \frac{(n-(n_{ik})_1-1)!}{((j_i)_1-2)! \cdot (n-(n_{ik})_1-(j_i)_1+1)!} \cdot \\
& \frac{((n_{ik})_z-(n_s)_z-1)!}{((j_i)_z-(j_{ik})_z-1)! \cdot ((n_{ik})_z+(j_{ik})_z-(n_s)_z-(j_i)_z)!} \cdot \\
& \frac{((n_s)_{z=s}-1)!}{((n_s)_{z=s}+(j_i)_{z=s}-\mathbf{n}-1)! \cdot (\mathbf{n}-(j_i)_{z=s})!} - \\
& (D-s) \cdot \prod_{z=2}^s \sum_{((j_i)_1=(j_{ik})_3-1)}^{\left(\right)} \sum_{(j_{ik})_z=(j_i)_z-1}^{\left(\right)} \sum_{((j_i)_z=z+1 \vee z=s \Rightarrow s+1)}^{\left(\mathbf{n}\right)} \\
& \sum_{n_i=n}^{\left((n_{ik})_1=n-(j_i)_1+1\right)} \sum_{\left((n_s)_z=(n_{ik})_{z-1}+(j_{ik})_{z-1}-(j_{ik})_z-\sum_{i=z-2} \mathbb{k}_i\right)}^{\left(\right)} \\
& \sum_{\left((n_s)_z=(n_{ik})_z+(j_{ik})_z-(j_i)_z-\sum_{i=z-1} \mathbb{k}_i\right)}^{\left(\right)}
\end{aligned}$$

$$\frac{(D-s)!}{(D-s-(j_i)_1+2)!} \cdot \frac{\left(D-s-(j_{ik}-j_{sa})_z\right)!}{\left(D-s-(j_i)_z+(j_{ik})_z-(j_{ik}-j_{sa})_z+1\right)!} \cdot \frac{(D-(j_i)_{z=s})!}{(D-\mathbf{n})!}.$$

$$\frac{(n-(n_{ik})_1-1)!}{((j_i)_1-2)! \cdot (n-(n_{ik})_1-(j_i)_1+1)!}.$$

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

$$\frac{((n_s)_{z=s}-2)!}{((n_s)_{z=s}+(j_i)_{z=s}-\mathbf{n}-2)! \cdot (\mathbf{n}-(j_i)_{z=s})!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z > 1 \Rightarrow$$

$$\begin{aligned} {}^0S_D^{DOS} = & (D-s) \cdot \prod_{z=2}^s \sum_{(j_i)_1=2}^{(j_{ik})_3-1} \sum_{(j_{ik})_z=z}^{(j_i)_z-1} \sum_{((j_i)_z=z+1 \vee z=s \Rightarrow s+1)}^{((j_{ik})_{z+2}-1 \vee n)} \\ & \sum_{n_i=n}^{} \left((n_{ik})_1 = (n_s)_2 + (j_i)_2 + \sum_{i=1}^{s-1} \mathbb{k}_i - (j_i)_1 \vee z=s \Rightarrow \mathbf{n} + \sum_{i=1}^{s-1} \mathbb{k}_i - (j_i)_1 + 2 \right) \\ & \sum_{(n_{ik})_z=(n_s)_z+(j_i)_z+\sum_{i=z-1}^{s-1} \mathbb{k}_i-(j_{ik})_z \vee z=s \Rightarrow \mathbf{n} + \sum_{i=z-1}^{s-1} \mathbb{k}_i-(j_{ik})_z+2}^{(n_{ik})_{z-1}+(j_{ik})_{z-1}-(j_{ik})_z-\sum_{i=z-2}^{s-1} \mathbb{k}_i} \\ & \sum_{((n_{ik})_z+(j_{ik})_z-(j_i)_z-\sum_{i=z-1}^{s-1} \mathbb{k}_i)}^{} \sum_{i=2}^{n-(j_i)_{z=s}+1} \\ & \frac{(D-s)!}{(D-s-(j_i)_1+2)!} \cdot \frac{\left(D-s-(j_{ik}-j_{sa})_z\right)!}{\left(D-s-(j_i)_z+(j_{ik})_z-(j_{ik}-j_{sa})_z+1\right)!} \cdot \frac{(D-(j_i)_{z=s})!}{(D-\mathbf{n})!}. \end{aligned}$$

$$\frac{(n-(n_{ik})_1-1)!}{((j_i)_1-2)! \cdot (n-(n_{ik})_1-(j_i)_1+1)!}.$$

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

$$\begin{aligned} & \left(\frac{((n_s)_{z=s}-2)!}{((n_s)_{z=s}+(j_i)_{z=s}-\mathbf{n}-2)! \cdot (\mathbf{n}-(j_i)_{z=s})!} + \right. \\ & \left. \frac{((n_s)_{z=s}-i-1)!}{((n_s)_{z=s}+(j_i)_{z=s}-\mathbf{n}-2)! \cdot (\mathbf{n}-(j_i)_{z=s}-i+1)!} \right) - \end{aligned}$$

$$\begin{aligned}
 & (D-s) \cdot \prod_{z=2}^s \sum_{\substack{() \\ ((j_i)_1 = (j_{ik})_3 - 1)} \atop ((j_{ik})_z = (j_i)_z - 1}} \sum_{\substack{() \\ ((j_i)_z = z+1 \vee z=s \Rightarrow s+1)}} \sum_{\substack{(n) \\ n_i=n \atop ((n_{ik})_1 = n - (j_i)_1 + 1)}} \\
 & \quad \sum_{\substack{() \\ (n_{ik})_z = (n_{ik})_{z-1} + (j_{ik})_{z-1} - (j_{ik})_z - \sum_{i=z-2} \mathbb{K}_i}} \sum_{\substack{() \\ ((n_s)_z = (n_{ik})_z + (j_{ik})_z - (j_i)_z - \sum_{i=z-1} \mathbb{K}_i)}} \\
 & \frac{(D-s)!}{(D-s-(j_i)_1+2)!} \cdot \frac{\left(D-s-(j_{ik}-j_{sa}^{ik})_z\right)!}{\left(D-s-(j_i)_z + (j_{ik})_z - (j_{ik}-j_{sa}^{ik})_z + 1\right)!} \cdot \frac{(D-(j_i)_{z=s})!}{(D-n)!} \cdot \\
 & \quad \frac{(n - (n_{ik})_1 - 1)!}{((j_i)_1 - 2)! \cdot (n - (n_{ik})_1 - (j_i)_1 + 1)!} \cdot \\
 & \quad \frac{((n_{ik})_z - (n_s)_z - 1)!}{((j_i)_z - (j_{ik})_z - 1)! \cdot ((n_{ik})_z + (j_{ik})_z - (n_s)_z - (j_i)_z)!} \cdot \\
 & \quad \frac{((n_s)_{z=s} - 2)!}{((n_s)_{z=s} + (j_i)_{z=s} - n - 2)! \cdot (n - (j_i)_{z=s})!}
 \end{aligned}$$

Örnek D7I; DNA kopyalanmasında Helikalar proteini, kopyalanma çatalında ikili sarmal tersine döndürerek eski iki zincire ayırır. 100 genden oluşan özel bir DNA'nın bir geninin bir ipliği adenin (A), guanin (G) ve sitozinin (C) farklı dizilimi ve beş timinin (T) bu üç azotlu bazın olasılık dağılımlarına bağımsız olasılıkla dağılımından oluşsun. Bir iplikteki AGC simetrisi kopyalanma çatalı olsun. Bu çatalın timinle başlayıp sonraki ilk farklı dizimli azotlu bazı adenin olan ve adeninle başlayan dağılımlardaki GCT düzgün olmayan simetrik yapılarının bulunduğu ökaryotik hücrelerde 5' ucunun bulunduğu kabul edelim¹. Helikalar proteini ve DNA polimeraz enzimi 5' ucunda kopyalanma hatasında düzeltme yapamıyorsa, a) DNA'da 5' uclu kopyalanma hatası nekadardır? b) timinle başlayan dağılımlardaki 5' uçlu kopyalanma hatası nekadardır? c) adeninle başlayan dağılımlardaki 5' uçlu kopyalanma hatası nekadardır? (${}^0S^{DOST} = 20$, ${}^0S^{DOST} \cdot 100 = 2.000$, ${}^0S_0^{DOST} = 10$,

$${}^0S_0^{DOST} \cdot 100 = 1.000, {}^0S_D^{DOST} = 10 \text{ ve } {}^0S_D^{DOST} \cdot 100 = 1.000 \text{ ise})$$

¹ Bu sorunun biyoloji kısmı için Campel, N. A. ve Reece J. B. "Biyoloji", ss: 296-300 bakılabilir

DNA = 100 gen, her gen için $D = 3, n = 8, \iota = 5, I = 1$ ve $s = 3 \Rightarrow$

$$a) {}^0S^{DOS} = ? \text{ ve } {}^0S^{DOS} \cdot 100 = ? \text{ b) } {}^0S_0^{DOS} = ? \text{ ve } {}^0S_0^{DOS} \cdot 100 = ?$$

$$c) {}^0S_D^{DOS} = ? \text{ ve } {}^0S_D^{DOS} \cdot 100 = ?$$

Bu örnekte ilişki belirlemesi olmadığından 2. seviyeden soru örneğidir.

a)

$${}^0S^{DOS} = \frac{n!}{(s + \iota - I)!} \cdot \frac{(s + \iota - 2 \cdot I)!}{(s - I)! \cdot (\iota - I)!} - \frac{n! \cdot (n - \iota - s + I)!}{(\iota - I)!} \cdot \left(\sum_{i=s-I}^{n-\iota} \mp \frac{(\iota - I + i)!}{i! \cdot (\iota + i)! \cdot (n - \iota - i)!} \right) - \frac{(n - s + 1)! \cdot (n - \iota - s + I)}{(\iota - I)! \cdot (n - \iota - s + I + 1)}$$

$${}^0S^{DOS} = \frac{8!}{(3 + 5 - 1)!} \cdot \frac{(3 + 5 - 2 \cdot 1)!}{(3 - 1)! \cdot (5 - 1)!} - \frac{8! \cdot (8 - 5 - 3 + 1 - 1)!}{(5 - 1)!} \cdot \left(\sum_{i=2}^3 \mp \frac{(5 - 1 + i)!}{i! \cdot (5 + i)! \cdot (8 - 5 - i)!} \right) - \frac{(8 - 3 + 1)! \cdot (8 - 5 - 3 + 1)}{(5 - 1)! \cdot (8 - 5 - 3 + 1 + 1)}$$

$${}^0S^{DOS} = \frac{8!}{7!} \cdot \frac{6!}{2! \cdot 4!} - \frac{8! \cdot 0!}{4!} \cdot \left(\sum_{i=2}^3 \mp \frac{(4 + i)!}{i! \cdot (5 + i)! \cdot (3 - i)!} \right) - \frac{6!}{4! \cdot 2}$$

$${}^0S^{DOS} = \frac{8!}{7!} \cdot \frac{6!}{2! \cdot 4!} - \frac{8! \cdot 0!}{4!} \cdot \frac{6!}{2! \cdot 7! \cdot 1!} + \frac{8! \cdot 0!}{4!} \cdot \frac{7!}{3! \cdot 8! \cdot 0!} - \frac{6!}{4! \cdot 2}$$

$${}^0S^{DOS} = 120 - 120 + 35 - 15$$

$${}^0S^{DOS} = 20$$

$${}^0S^{DOS} \cdot 100 = 20 \cdot 100 = 2.000$$

ökaryotik hücrenin DNA'sında 5' uçlu 2.000 kopyalanma hatası oluşur. Tek kalan düzgün olmayan simetrik olasılıkla aynı sonuçların elde edilmesinin nedeni simetride bulunmayan bir (adenin) azotlu bazın olmasıdır.

b)

$${}^0S_0^{DOS} = \frac{(n-1)! \cdot (n-\iota-s+I)!}{(\iota-I-1)!} \cdot \left(\sum_{i=s-I+1}^{n-\iota} \mp \frac{(\iota-I+i-1)!}{i! \cdot (\iota+i-1)! \cdot (n-\iota-i)!} \right) - \frac{(n-s)! \cdot (n-\iota-s+I)}{(\iota-I-1)! \cdot (n-\iota-s+I+1)}$$

$${}^0S_0^{DOS} = \frac{(8-1)! \cdot (8-5-3+1)!}{(5-1-1)!} \cdot \left(\sum_{i=3-1+1}^{8-5} \mp \frac{(5-1+i-1)!}{i! \cdot (5+i-1)! \cdot (8-5-i)!} \right) - \frac{(8-3)! \cdot (8-5-3+1)}{(5-1-1)! \cdot (8-5-3+1+1)}$$

$${}^0S_0^{DOS} = \frac{7! \cdot 1!}{3!} \cdot \left(\sum_{i=3}^3 \mp \frac{(3+i)!}{i! \cdot (4+i)! \cdot (3-i)!} \right) - \frac{5! \cdot 1!}{3! \cdot 2}$$

$${}^0S_0^{DOS} = \frac{7!}{3!} \cdot \frac{6!}{3! \cdot 7! \cdot 0!} - \frac{5!}{3! \cdot 2}$$

$${}^0S_0^{DOS} = 20 - 10$$

$${}^0S_0^{DOS} = 10$$

$${}^0S_0^{DOS} \cdot 100 = 10 \cdot 100 = 1.000$$

ökaryotik hücrenin DNA'sında 5' üçlu 2.000 kopyalanma hatasının 1.000'ü timin ile başlayıp sonraki ilk farklı dizilişli azotlu bazı adenin olan dağılımlarda bulunur. Tek kalan düzgün olmayan simetrik olasılıkla aynı sonuçların elde edilmesinin nedeni simetride bulunmayan bir (adenin) azotlu bazın olmasıdır.

c)

$${}^0S_D^{DOS} = \frac{n! \cdot (n-\iota-s+I)!}{(\iota-I)!} \cdot \left(\sum_{i=s-I+1}^{n-\iota} \mp \frac{(\iota-I+i)!}{i! \cdot (\iota+i-1)! \cdot (n-\iota-i)!} \right) - \frac{(n-1)! \cdot (n-\iota-s+I)!}{(\iota-I-1)!} \cdot \left(\sum_{i=s-I+1}^{n-\iota} \mp \frac{(\iota-I+i-1)!}{i! \cdot (\iota+i-1)! \cdot (n-\iota-i)!} \right) - \frac{(n-s)! \cdot (n-\iota-s+I)}{(\iota-I)!}$$

$$\begin{aligned}
 {}^0S_D^{DOS} &= \frac{8! \cdot (8 - 5 - 3 + 1)!}{(5 - 1)!} \cdot \left(\sum_{i=3-1+1}^{8-5} \mp \frac{(5 - 1 + i)!}{i! \cdot (5 + i)! \cdot (8 - 5 - i)!} \right) - \\
 &\quad \frac{(8 - 1)! \cdot (8 - 5 - 3 + 1)!}{(5 - 1 - 1)!} \cdot \left(\sum_{i=3-1+1}^{8-5} \mp \frac{(5 - 1 + i - 1)!}{i! \cdot (5 + i - 1)! \cdot (8 - 5 - i)!} \right) - \\
 &\quad \frac{(8 - 3)! \cdot (8 - 5 - 3 + 1)}{(5 - 1)!} \\
 {}^0S_D^{DOS} &= \frac{8! \cdot 1!}{4!} \cdot \left(\sum_{i=3}^3 \mp \frac{(4 + i)!}{i! \cdot (5 + i)! \cdot (3 - i)!} \right) - \frac{7! \cdot 1!}{3!} \cdot \left(\sum_{i=3}^3 \mp \frac{(3 + i)!}{i! \cdot (4 + i)! \cdot (3 - i)!} \right) - \frac{5!}{4!} \\
 {}^0S_D^{DOS} &= \frac{8!}{4!} \cdot \frac{7!}{3! \cdot 8! \cdot 0!} - \frac{7!}{3!} \cdot \frac{6!}{3! \cdot 7! \cdot 0!} - \frac{5!}{4!} \\
 {}^0S_D^{DOS} &= 35 - 20 - 5 \\
 {}^0S_D^{DOS} &= 10
 \end{aligned}$$

$${}^0S_D^{DOS} \cdot 100 = 10 \cdot 100 = 1.000$$

ökaryatik hücrenin DNA'sında 5' uçlu 2.000 kopyalanma hatasının 1.000'ü ise adenin ile başlayan dağılımlarda bulunur. Tek kalan düzgün olmayan simetrik olasılıkla aynı sonuçların elde edilmesinin nedeni simetride bulunmayan bir (adenin) azotlu bazın olmasıdır.

BAĞIMLI DURUMLA BAŞLAYAN DAĞILIMLARDA BİR BAĞIMLI-BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİK BULUNMAMA OLASILIĞI

Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde $\{1, 0\}$, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısı; bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımin başladığı duruma göre tek simetrik olasılıktan, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımsız tek simetrik olasılığın farkının $(D - s)$ çarpımından, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılığın çıkarılmasına eşit olur. Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, kalan düzgün olmayan simetrik bulunmama olasılığı için,

$${}^0S_D^{DOS,B} = \left({}_{0,T}^1S_1^1 - {}_{0,1t}^1S_1^1 \right) \cdot (D - s) - {}^0S_D^{DOS}$$

eşitliği elde edilir. Bu eşitliğe bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde; simetride bulunmayan bağımlı durumlarla başlayan dağılımlardan, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısına *bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı* denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı ${}^0S_D^{DOS,B}$ ile gösterilecektir.

BAĞIMLI DURUMLA BAŞLAYAN DAĞILIMLARDA BAĞIMLI-BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİK BULUNMAMA OLASILIĞI

Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde $\{1, 2, 3, 4, 5, \mathbf{0}\}$ veya $\{1, 2, \mathbf{0}, \mathbf{0}, \mathbf{0}, 3, 4, \mathbf{0}, \mathbf{0}, 5, \mathbf{0}\}$, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısı; bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılıminin başladığı duruma göre tek simetrik olasılıktan, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımsız tek simetrik olasılığın farkının $(D - s)$ çarpımından, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumu bağımlı kalan düzgün olmayan simetrik olasılığın çıkarılmasına eşit olur. Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, kalan düzgün olmayan simetrik bulunmama olasılığı için,

$${}^0S_D^{DOS,B} = ({}_{0,T}^1S_1^1 - {}_{0,1t}^1S_1^1) \cdot (D - s) - {}^0S_D^{DOS}$$

eşitliği elde edilir. Bu eşitlige bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumu bağımlı kalan düzgün olmayan simetrik bulunmama olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde; simetride bulunmayan bağımlı durumlarla başlayan dağılımlardan, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısına ***bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı*** denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı ${}^0S_D^{DOS,B}$ ile gösterilecektir.

BÖLÜM D KALAN SİMETRİK OLASILIK

ÖZET

KALAN SİMETRİK OLASILIKLAR

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan ve bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, simetrik olasılıklar; tek kalan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S^{DS} = S^{DST} \cdot (D - s)$$

veya

$$_0S^{DS} = {}_0S^{DST} \cdot (D - s)$$

veya

$$^0S^{DS} = {}^0S^{DST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, simetrik olasılıklar; aynı dağılımlardaki tek kalan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_0^{DS} = S_0^{DST} \cdot (D - s)$$

veya

$$_0S_0^{DS} = {}_0S_0^{DST} \cdot (D - s)$$

veya

$$^0S_0^{DS} = {}^0S_0^{DST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, simetrik olasılıklar; aynı dağılımlardaki tek kalan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_D^{DS} = S_D^{DST} \cdot (D - s)$$

veya

$$_0S_D^{DS} = {}_0S_D^{DST} \cdot (D - s)$$

veya

$$^0S_D^{DS} = {}^0S_D^{DST} \cdot (D - s)$$

KALAN DÜZGÜN SİMETRİK OLASILIKLAR

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan ve bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün simetrik olasılıklar; tek kalan düzgün simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S^{DSS} = S^{DSST} \cdot (D - s)$$

veya

$$_0S^{DSS} = {}_0S^{DSST} \cdot (D - s)$$

veya

$${}^0S^{DSS} = {}^0S^{DSST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_0^{DSS} = S_0^{DSST} \cdot (D - s)$$

veya

$${}_0S_0^{DSS} = {}_0S_0^{DSST} \cdot (D - s)$$

veya

$${}^0S_0^{DSS} = {}^0S_0^{DSST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_D^{DSS} = S_D^{DSST} \cdot (D - s)$$

veya

$${}_0S_D^{DSS} = {}_0S_D^{DSST} \cdot (D - s)$$

veya

$${}^0S_D^{DSS} = {}^0S_D^{DSST} \cdot (D - s)$$

KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIKLAR

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan ve bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik olasılıklar; tek kalan düzgün olmayan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S^{DOS} = S^{DOST} \cdot (D - s)$$

veya

$$_0S^{DOS} = {}^0S^{DOST} \cdot (D - s)$$

veya

$${}^0S^{DOS} = {}^0S^{DOST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün olmayan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_0^{DOS} = S_0^{DOST} \cdot (D - s)$$

veya

$${}_0S_0^{DOS} = {}^0S_0^{DOST} \cdot (D - s)$$

veya

$${}^0S_0^{DOS} = {}^0S_0^{DOST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün olmayan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_D^{DOS} = S_D^{DOST} \cdot (D - s)$$

veya

$${}_0S_D^{DOS} = {}^0S_D^{DOST} \cdot (D - s)$$

veya

$${}^0S_D^{DOS} = {}^0S_D^{DOST} \cdot (D - s)$$

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimli

bağımlı durumlu

kalan simetrik olasılık,
2.1.17/6

kalan düzgün simetrik
olasılık, 2.1.18.1/6

kalan düzgün olmayan
simetrik olasılık, 2.1.19/4

kalan simetrik bulunmama
olasılığı, 2.1.17/470

kalan düzgün simetrik
bulunmama olasılığı,
2.1.18.1/1067

kalan düzgün olmayan
simetrik bulunmama
olasılığı, 2.1.19/1036

bağımsız kalan simetrik
olasılık, 2.1.17/24

bağımsız kalan düzgün
olasılık, 2.1.18.1/112

bağımsız kalan düzgün
olmayan simetrik olasılık,
2.1.19/348

bağımsız kalan simetrik
bulunmama olasılığı,
2.1.17/471

bağımsız kalan düzgün
simetrik bulunmama
olasılığı, 2.1.18.1/1068

bağımsız kalan düzgün
olmayan simetrik
bulunmama olasılığı,
2.1.19/1037

bağımlı kalan simetrik
olasılık, 2.1.17/42

bağımlı kalan simetrik
olasılık, 2.1.18.1/314

bağımlı kalan düzgün
olmayan simetrik olasılık,
2.1.19/692

bağımlı kalan simetrik
bulunmama olasılığı,
2.1.17/472

bağımlı kalan düzgün
simetrik bulunmama
olasılığı, 2.1.18.1/1068

bağımlı kalan düzgün
olmayan simetrik
bulunmama olasılığı,
2.1.19/1038

bağımsız-bağımlı durumlu

kalan simetrik olasılık,
2.1.17/61

kalan düzgün simetrik
olasılık, 2.1.18.1/516

kalan düzgün olmayan
simetrik olasılık, 2.1.20.1/4

kalan simetrik bulunmama
olasılığı, 2.1.17/473

kalan düzgün simetrik bulunmama olasılığı, 2.1.18.1/1069	bağımlı kalan düzgün simetrik bulunmama olasılığı, 2.1.18.1/1070
kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.20.1/609	bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.20.3/361
bağımsız kalan simetrik olasılık, 2.1.17/90	bağımlı-bir bağımsız durumlu
bağımsız kalan düzgün olasılık, 2.1.18.1/634	kalan simetrik olasılık, 2.1.17/147
bağımsız kalan düzgün olmayan simetrik olasılık, 2.1.20.2/4	kalan düzgün simetrik olasılık, 2.1.18.2/9
bağımsız kalan simetrik bulunmama olasılığı, 2.1.17/474	kalan düzgün olmayan simetrik olasılık, 2.1.21.1/6
bağımsız kalan düzgün simetrik bulunmama olasılığı, 2.1.18.1/1070	kalan simetrik bulunmama olasılığı, 2.1.17/477
bağımsız kalan düzgün simetrik bulunmama olasılığı, 2.1.18.1/1070	kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/553
bağımsız olmayan bulunmama bulunmama olasılığı, 2.1.20.2/609	kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.21.1/548
bağımlı kalan simetrik olasılık, 2.1.17/119	bağımsız kalan simetrik olasılık, 2.1.17/173
bağımlı kalan düzgün olasılık, 2.1.18.1/853	bağımsız kalan düzgün olasılık, 2.1.18.2/121
bağımlı kalan düzgün olmayan simetrik olasılık, 2.1.20.3/4	bağımsız kalan düzgün olmayan simetrik olasılık, 2.1.21.2/6
bağımlı kalan simetrik bulunmama olasılığı, 2.1.17/474	bağımsız kalan simetrik bulunmama olasılığı, 2.1.17/478
	bağımsız kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/554

bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.21.2/548	kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.22.1/554
bağımlı kalan simetrik olasılık, 2.1.17/200	bağımsız kalan simetrik olasılık, 2.1.17/263
bağımlı kalan düzgün simetrik olasılık, 2.1.18.2/335	bağımsız kalan düzgün simetrik olasılık, 2.1.18.3/121
bağımlı kalan düzgün olmayan simetrik olasılık, 2.1.21.3/6	bağımsız kalan düzgün olmayan simetrik olasılık, 2.1.22.2/6
bağımlı kalan simetrik bulunmama olasılığı, 2.1.17/478	bağımsız kalan simetrik bulunmama olasılığı, 2.1.17/482
bağımlı kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/554	bağımsız kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1187
bağımlı kalan düzgün simetrik bulunmama olasılığı, 2.1.21.3/552	bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.22.2/554
bağımlı-bağımsız durumlu kalan simetrik olasılık, 2.1.17/236	bağımlı kalan simetrik olasılık, 2.1.17/291
bağımlı kalan düzgün simetrik olasılık, 2.1.18.3/5	bağımlı kalan düzgün simetrik olasılık, 2.1.18.3/339
bağımlı kalan düzgün olmayan simetrik olasılık, 2.1.22.1/6	bağımlı kalan düzgün olmayan simetrik olasılık, 2.1.22.3/7
bağımlı kalan simetrik bulunmama olasılığı, 2.1.17/481	bağımlı kalan simetrik bulunmama olasılığı, 2.1.17/482
bağımlı kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1186	bağımlı kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1187

bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.22.3/556	bulunmama olasılığı, 2.1.23.2/954
bağımsız-bağımsız durumlu kalan simetrik olasılık, 2.1.17/324	bağımlı kalan simetrik olasılık, 2.1.17/430
kalan düzgün simetrik olasılık, 2.1.18.3/556	bağımlı kalan düzgün simetrik olasılık, 2.1.18.3/947
kalan düzgün olmayan simetrik olasılık, 2.1.23.1/4	bağımlı kalan düzgün olmayan simetrik olasılık, 2.1.23.3/4
kalan simetrik bulunmama olasılığı, 2.1.17/483	bağımlı kalan simetrik bulunmama olasılığı, 2.1.17/484
kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1188	bağımlı kalan düzgün bulunmama olasılığı, 2.1.18.3/1189
kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.23.1/954	bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.23.3/560
bağımsız kalan simetrik olasılık, 2.1.17/377	bir bağımlı-bir bağımsız durumlu
bağımsız kalan düzgün olasılık, 2.1.18.3/698	kalan simetrik olasılık, 2.1.17/140
bağımsız kalan düzgün olmayan simetrik olasılık, 2.1.23.2/4	kalan düzgün simetrik olasılık, 2.1.18.2/4
bağımsız kalan simetrik bulunmama olasılığı, 2.1.17/484	kalan düzgün olmayan simetrik olasılık, 2.1.21.1/4
bağımsız kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1189	kalan simetrik bulunmama olasılığı, 2.1.17/475
bağımsız kalan düzgün olmayan simetrik	kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/551
	kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.21.1/547

bağımsız kalan simetrik olasılık, 2.1.17/142	kalan simetrik olasılık, 2.1.17/226
bağımsız kalan düzgün simetrik olasılık, 2.1.18.2/5, 6	kalan düzgün simetrik olasılık, 2.1.18.2/545
bağımsız kalan düzgün olmayan simetrik olasılık, 2.1.21.2/4	kalan düzgün olmayan simetrik olasılık, 2.1.22.1/4
bağımsız kalan simetrik bulunmama olasılığı, 2.1.17/476	kalan simetrik bulunmama olasılığı, 2.1.17/479
bağımsız kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/552	kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/555
bağımsız kalan olmayan düzgün simetrik bulunmama olasılığı, 2.1.21.2/547	kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.22.1/553
bağımlı kalan simetrik olasılık, 2.1.17/143	bağımsız kalan simetrik olasılık, 2.1.17/228, 229
bağımlı kalan düzgün simetrik olasılık, 2.1.18.2/7	bağımsız kalan düzgün olasılık, 2.1.18.2/547
bağımlı kalan düzgün olmayan simetrik olasılık, 2.1.21.3/4	bağımsız kalan düzgün olmayan simetrik olasılık, 2.1.22.2/4
bağımlı kalan simetrik bulunmama olasılığı, 2.1.17/476	bağımsız kalan simetrik bulunmama olasılığı, 2.1.17/480
bağımlı kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/552	bağımsız kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/556
bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.21.3/551	bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.22.2/553
bir bağımlı-bağımsız durumlu	

bağımlı kalan düzgün simetrik olasılık, 2.1.18.2/549	bağımsız birlikte kalan simetrik bulunmama olasılığı, 2.1.17/487
bağımlı kalan düzgün olmayan simetrik olasılık, 2.1.22.3/4	bağımsız birlikte kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1191
bağımlı kalan simetrik bulunmama olasılığı, 2.1.17/480	bağımsız birlikte kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.23.2/955
bağımlı kalan düzgün simetrik bulunmama olasılığı, 2.1.18.2/556	bağımlı birlikte kalan simetrik olasılık, 2.1.17/466
bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.22.3/555	bağımlı birlikte kalan düzgün simetrik olasılık, 2.1.18.3/1185
birlikte kalan simetrik olasılık, 2.1.17/463	bağımlı birlikte kalan düzgün olmayan simetrik olasılık, 2.1.23.3/559
birlikte kalan düzgün simetrik olasılık, 2.1.18.3/1183	bağımlı birlikte kalan simetrik bulunmama olasılığı, 2.1.17/488
birlikte kalan düzgün olmayan simetrik olasılık, 2.1.23.1/953	bağımlı birlikte kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1192
birlikte kalan simetrik bulunmama olasılığı, 2.1.17/485	bağımlı birlikte kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.23.3/561
birlikte kalan düzgün simetrik bulunmama olasılığı, 2.1.18.3/1190	
birlikte kalan düzgün olmayan simetrik bulunmama olasılığı, 2.1.23.1/955	
bağımsız birlikte kalan simetrik olasılık, 2.1.17/464, 465	
bağımsız birlikte kalan düzgün simetrik olasılık, 2.1.18.3/1184	
bağımsız birlikte kalan düzgün olmayan simetrik olasılık, 2.1.23.2/953	

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 aynı cilt numaraları ile soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt, bağımlı ve bir bağımsız olasılıklı farklı dizilişli bir bağımlı-bir bağımsız ve bağımlı-bir bağımsız durumlu simetrinin, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki kalan düzgün olmayan simetrik olasılığı ve kalan düzgün olmayan simetrik bulunmama olasılıklarının tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilişli Bir Bağımlı-Bir Bağımsız ve Bağımlı-Bir Bağımsız Durumlu Simetrinin Bağımlı Durumlarla Başlayan Dağılımlardaki Kalan Düzgün Olmayan Simetrik Olasılık kitabında, bağımlı durum sayısı, bağımlı olay sayısına eşit farklı dizilişli dağılımlar ve bir bağımsız olasılıklı dağılımla elde edilebilecek yeni olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan dağılımlarda, bir bağımlı-bir bağımsız ve bağımlı-bir bağımsız durumlardan oluşan simetrinin; düzgün olmayan simetrik olasılıkları ve düzgün olmayan simetrik bulunmama olasılıklarının tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin bu cildinde verilen kalan düzgün olmayan simetrik olasılık eşitlikleri teorik yöntemle üretilmiştir. Tanım ve eşitliklerin üretilmesinde dış kaynak kullanılmamıştır.

