Field kinematics						
Momentum Norm Frame						
$k^{\mu} \qquad \left  k^2 == k_{\mu} k^{\mu} \right  n^{\mu} == \frac{k^{\mu}}{k}$						
Fundamental fields						
Fundament	al field	Symmetries	Decompo	osition in SO(3) irreps	Source	
$\mathcal{A}_{lphaeta\chi}$		StrongGenSet[{}, GenSet[]]	$\mathcal{A}_{3}^{\#1} \alpha \beta \chi$ $\frac{1}{15} \eta_{\alpha \chi}$ $\frac{1}{3} \mathcal{A}_{2}^{\#2}$ $\mathcal{A}_{1}^{\#1} \alpha \chi$ $\frac{1}{3} \mathcal{A}_{2}^{\#3}$	$ + \frac{1}{3} \eta_{\beta\chi} \mathcal{R}_{1^{-}\alpha}^{\#6} - \frac{1}{6} \eta_{\alpha\chi} \mathcal{R}_{1^{-}\beta}^{\#6} - \frac{1}{6} \eta_{\alpha\beta} \mathcal{R}_{1^{-}\chi}^{\#6} + \frac{1}{15} \eta_{\beta\chi} \mathcal{R}_{1^{-}\alpha}^{\#4} + $ $ \mathcal{R}_{1^{-}\beta}^{\#4} + \frac{1}{15} \eta_{\alpha\beta} \mathcal{R}_{1^{-}\chi}^{\#4} + \mathcal{R}_{1^{+}\beta\chi}^{\#2} n_{\alpha} + \frac{1}{9} \eta_{\beta\chi} \mathcal{R}_{0^{+}}^{\#3} n_{\alpha} + $ $ \mathcal{R}_{1^{-}\beta}^{\#4} + \frac{1}{15} \eta_{\alpha\beta} \mathcal{R}_{1^{-}\chi}^{\#4} + \mathcal{R}_{1^{+}\beta\chi}^{\#2} n_{\alpha} + \frac{1}{9} \eta_{\beta\chi} \mathcal{R}_{0^{+}}^{\#3} n_{\alpha} + $ $ \mathcal{R}_{1^{-}\beta}^{\#4} + \frac{1}{15} \eta_{\alpha\beta} \mathcal{R}_{1^{-}\chi}^{\#4} n_{\alpha} + \frac{1}{9} \eta_{\alpha\chi} \mathcal{R}_{0^{+}\eta_{\alpha}}^{\#4} n_{\alpha} + \frac{1}{3} \eta_{\alpha\chi} \mathcal{R}_{0^{+}\eta_{\beta}}^{\#1} n_{\beta} - $ $ \mathcal{R}_{1^{-}\beta}^{\#4} + \mathcal{R}_{1^{+}\beta\chi}^{\#4} n_{\beta} + \frac{1}{9} \eta_{\alpha\chi} \mathcal{R}_{0^{+}\eta_{\beta}}^{\#3} n_{\beta} - \frac{1}{2} \mathcal{R}_{1^{+}\alpha\chi}^{\#3} n_{\beta} + \frac{1}{3} \mathcal{R}_{2^{+}\alpha\chi}^{\#2} n_{\beta} - $ $ \mathcal{R}_{1^{-}\beta}^{\#4} + \mathcal{R}_{1^{-}\beta\chi}^{\#4} n_{\beta} - \frac{1}{2} \mathcal{R}_{1^{-}\chi}^{\#1} n_{\alpha} n_{\beta} - \mathcal{R}_{1^{-}\chi}^{\#2} n_{\alpha} n_{\beta} + $ $ \mathcal{R}_{1^{-}\beta}^{\#4} + \mathcal{R}_{1^{-}\beta\chi}^{\#4} n_{\beta} - \frac{1}{2} \mathcal{R}_{1^{-}\chi}^{\#1} n_{\alpha} n_{\beta} - \mathcal{R}_{1^{-}\chi}^{\#2} n_{\alpha} n_{\beta} + $	$\Delta_{lphaeta\chi}$	
SO(2) irra			$\frac{1}{3} \eta_{\alpha\beta} \mathcal{F}$ $\frac{1}{3} \mathcal{A}_{2}^{\#2} \alpha$ $\mathcal{A}_{1}^{\#2} \beta n$ $\frac{1}{3} \mathcal{A}_{1}^{\#3} \beta$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
SO(3) irre						
$\frac{SO(3) \text{ irrep}}{\mathcal{R}_{0}^{#1}}$		etries  GenSet[{}, GenSet[]]		Expansion in fundamental field $-\frac{1}{2} \mathcal{A}^{\alpha}_{\alpha}^{\beta} n_{\beta} + \frac{1}{2} \mathcal{A}^{\alpha\beta}_{\alpha} n_{\beta}$		Source $\Delta_{0^+}^{#1}$
$\mathcal{A}_{0}^{\#2}$	StrongGenSet[{}, GenSet[]]			$\mathcal{A}^{\alpha\beta\chi} n_{\alpha} n_{\beta} n_{\chi}$		Δ <sub>0</sub> <sup>#2</sup>
$\mathcal{R}_{0}^{\#3}$	Strong	StrongGenSet[{}, GenSet[]]		$\mathcal{A}^{\alpha\beta}_{\beta} n_{\alpha} + \mathcal{A}^{\alpha\beta}_{\alpha} n_{\beta} + \mathcal{A}^{\alpha\beta}_{\alpha} n_{\beta} - 3 \mathcal{A}^{\alpha\beta\chi} n_{\alpha} n_{\beta} n_{\chi}$		Δ#3
$\overline{{\mathcal R}_{0}^{\#4}}$	StrongGenSet[{}, GenSet[]]			$\mathcal{A}^{\alpha\beta}_{\beta} n_{\alpha}^{-\frac{1}{2}} \mathcal{A}^{\alpha\beta}_{\alpha} n_{\beta}^{-\frac{1}{2}} \mathcal{A}^{\alpha\beta}_{\alpha} n_{\beta}$		$\Delta_{0}^{#4}$
$\overline{\mathcal{F}_0^{\sharp 1}}$	StrongGenSet[{}, GenSet[]]			$\epsilon \eta_{\alpha\beta\chi\delta} \mathcal{A}^{\alpha\beta\chi} n^{\delta}$		Δ#1
$\mathcal{A}_{1}^{\sharp 1}{}_{lphaeta}$	StrongGenSet[{1, 2}, GenSet[-(1,2)]]		]	$\frac{1}{4} \mathcal{A}_{\alpha\beta}^{ X} n_{\chi} - \frac{1}{4} \mathcal{A}_{\alpha\beta}^{ X} n_{\chi} - \frac{1}{4} \mathcal{A}_{\beta\alpha}^{ X} n_{\chi} + \frac{1}{4} \mathcal{A}_{\beta\alpha}^{ X} n_{\chi} - \frac{1}{4} \mathcal{A}_{\beta}^{ X} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{4} \mathcal{A}_{\beta\alpha}^{ X} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{4} \mathcal{A}_{\alpha}^{ X} n_{\beta} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{ X\delta} n_{\beta} n_{\chi} n_{\delta}$		$\Delta_{1}^{\#1}{}_{lphaeta}$
$\mathcal{A}_{1}^{\#2}{}_{lphaeta}$	StrongGenSet[{1, 2}, GenSet[-(1,2)]]		]	$\frac{1}{2} \mathcal{A}_{\alpha\beta}^{X} n_{\chi}^{-\frac{1}{2}} \mathcal{A}_{\beta\alpha}^{X} n_{\chi}^{+\frac{1}{2}} \mathcal{A}_{\beta}^{X\delta} n_{\alpha} n_{\chi}^{-\frac{1}{2}} n_{\delta}^{-\frac{1}{2}} n_{\alpha}^{X\delta} n_{\alpha}^{\delta} n_{\alpha}^{-\frac{1}{2}} n_{\delta}^{X\delta} n_{\alpha}^{\delta} n_{\beta}^{-\frac{1}{2}} n_{\delta}^{X\delta} n_{\delta}^{-\frac{1}{2}} n_{\delta}^{X\delta} n_{\delta}^{X\delta} n_{\delta}^{-\frac{1}{2}} n_{\delta}^{X\delta} n_{\delta}^{X\delta} n_{\delta}^{-\frac{1}{2}} n_{\delta}^{X\delta} n_{\delta}^{$		$\Delta_{1}^{#2}{}_{lphaeta}$
$\mathcal{A}_{1}^{\#3}{}_{lphaeta}$	StrongGenSet[{1, 2}, GenSet[-(1,2)]]		]	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\Delta_{1}^{\#3}{}_{\alpha\beta}$
${\mathcal R}_{1^{-}lpha}^{\#1}$	StrongGenSet[{}, GenSet[]]			$-\frac{1}{2} \mathcal{A}^{\beta}_{\alpha\beta} + \frac{1}{2} \mathcal{A}^{\beta}_{\beta\alpha} - \frac{1}{2} \mathcal{A}^{\beta}_{\beta}^{\chi} n_{\alpha} n_{\chi} +$ $\frac{1}{2} \mathcal{A}^{\beta\chi}_{\beta} n_{\alpha} n_{\chi} + \frac{1}{2} \mathcal{A}^{\beta}_{\alpha}^{\chi} n_{\beta} n_{\chi} - \frac{1}{2} \mathcal{A}^{\beta\chi}_{\alpha} n_{\beta} n_{\chi}$		$\Delta_{1}^{#1}{}_{\alpha}$
$\overline{{\mathcal R}_{1^-\alpha}^{\#2}}_{lpha}$	StrongGenSet[{}, GenSet[]]			$\frac{1}{2} \mathcal{A}^{\beta}_{\alpha}^{\chi} n_{\beta} n_{\chi}^{-\frac{1}{2}} \mathcal{A}^{\beta\chi}_{\alpha} n_{\beta} n_{\chi}$		$\Delta_{1}^{#2}\alpha$
$\mathcal{A}_{1}^{\#3}{}_{\alpha}$	StrongGenSet[{}, GenSet[]]			$\mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} - 3 \mathcal{A}^{\beta\chi\delta} n_{\alpha} n_{\beta} n_{\chi} n_{\delta}$		$\Delta_{1}^{#3}$ $\alpha$
${\mathcal R}_1^{\#4}{}_{lpha}$	Strong	ngGenSet[{}, GenSet[]]		$\mathcal{A}_{\alpha\beta}^{\beta} + \mathcal{A}_{\alpha\beta}^{\beta} + \mathcal{A}_{\beta\alpha}^{\beta} - \mathcal{A}_{\chi}^{\beta\chi} n_{\alpha} n_{\beta} - \mathcal{A}_{\beta}^{\beta\chi} n_{\alpha} n_{\chi} - \mathcal{A}_{\beta}^{\beta\chi} n_{\alpha} n_{\chi} - \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} - \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} - \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} - \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + 3 \mathcal{A}_{\alpha}^{\beta\chi\delta} n_{\alpha} n_{\beta} n_{\chi} n_{\delta}$		$\Delta_{1}^{\#4}{}_{\alpha}$
${\mathcal R}_{1^-lpha}^{\#5}$				$\mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi}^{-\frac{1}{2}} \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi}^{-\frac{1}{2}} \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi}$		Δ#5 α
${\mathscr R}_{1^-}^{\#6}{}_{lpha}$	StrongGenSet[{}, GenSet[]]			$\mathcal{A}_{\alpha\beta}^{\beta} - \frac{1}{2} \mathcal{A}_{\alpha\beta}^{\beta} - \frac{1}{2} \mathcal{A}_{\beta\alpha}^{\beta} - \mathcal{A}_{\chi}^{\beta\chi} n_{\alpha} n_{\beta} + \frac{1}{2} \mathcal{A}_{\beta}^{\beta\chi} n_{\alpha} n_{\chi} + \frac{1}{2} \mathcal{A}_{\beta}^{\beta\chi} n_{\alpha} n_{\chi} - \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \frac{1}{2} \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \frac{1}{2} \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \frac{1}{2} \mathcal{A}_{\alpha}^{\beta\chi} n_{\beta} n_{\chi}$		$\Delta_{1}^{#6}$ $\alpha$
$\mathcal{R}^{\sharp 1}_{2^+ lpha eta}$	Strong	ngGenSet[{1, 2}, GenSet[(1,2)]]		$-\frac{1}{4} \mathcal{A}_{\alpha\beta}^{X} n_{\chi} + \frac{1}{4} \mathcal{A}_{\alpha\beta}^{X} n_{\chi} - \frac{1}{4} \mathcal{A}_{\beta\alpha}^{X} n_{\chi} +$ $\frac{1}{4} \mathcal{A}_{\beta\alpha}^{X} n_{\chi} + \frac{1}{6} \eta_{\alpha\beta} \mathcal{A}_{\chi}^{X\delta} n_{\delta} - \frac{1}{6} \eta_{\alpha\beta} \mathcal{A}_{\chi}^{X\delta} n_{\delta} -$ $\frac{1}{6} \mathcal{A}_{\chi}^{X\delta} n_{\alpha} n_{\beta} n_{\delta} + \frac{1}{6} \mathcal{A}_{\chi}^{X\delta} n_{\alpha} n_{\beta} n_{\delta} + \frac{1}{4} \mathcal{A}_{\beta}^{X\delta} n_{\alpha} n_{\chi} n_{\delta} -$ $\frac{1}{4} \mathcal{A}_{\beta}^{X\delta} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{4} \mathcal{A}_{\alpha}^{X\delta} n_{\beta} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{X\delta} n_{\beta} n_{\chi} n_{\delta} -$ $\frac{1}{4} \mathcal{A}_{\beta}^{X\delta} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{4} \mathcal{A}_{\alpha}^{X\delta} n_{\beta} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{X\delta} n_{\beta} n_{\chi} n_{\delta} -$		$\Delta_{2}^{\#1}{}_{\alpha\beta}$
$\mathcal{A}_{2}^{\#2}{}_{lphaeta}$	Strong	rongGenSet[{1, 2}, GenSet[(1,2)]]		$\frac{1}{2} \mathcal{A}_{\alpha\beta}^{ \chi} n_{\chi} + \frac{1}{2} \mathcal{A}_{\alpha\beta}^{ \chi} n_{\chi} + \frac{1}{2} \mathcal{A}_{\beta\alpha}^{ \chi} n_{\chi} + \frac{1}{2} \mathcal{A}_{\alpha\beta}^{ \chi} n_{\chi} n_{\chi} n_{\chi} + \frac{1}{2} \mathcal{A}_{\alpha\beta}^{ \chi} n_{\chi} n_$		$\Delta_{2}^{\#2}{}_{\alpha\beta}$
$\mathcal{A}_{2}^{#3}$ $\alpha\beta$	StrongGenSet[{1, 2}, GenSet[(1,2)]]			$-\frac{1}{4} \mathcal{A}_{\alpha\beta}^{\ \ X} n_{\chi} - \frac{1}{4} \mathcal{A}_{\alpha\beta}^{\ \ X} n_{\chi} - \frac{1}{4} \mathcal{A}_{\beta\alpha}^{\ \ X} n_{\chi} - \frac{1}{4} \mathcal{A}_{\beta\alpha}^{\ \ X} n_{\chi} + \frac{1}{2} \mathcal{A}_{\alpha\beta}^{\ \ X} n_{\chi} n_{\delta} + \frac{1}{2} \mathcal{A}_{\alpha\beta}^{\ \ X} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{\ \ X} n_{\alpha} n_{\beta} n_{\delta} + \frac{1}{2} \mathcal{A}_{\beta}^{\ \ X} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\beta}^{\ \ X} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\beta}^{\ \ X} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\beta}^{\ \ X} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{2} \mathcal{A}_{\alpha}^{\ \ X} n_{\beta} n_{\chi} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{\ \ \ X} n_{\delta} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{\ \ X} n_{\gamma} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{\ \ \ X} n_{\gamma} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{\ \ \ \ X} n_{\gamma} n_{\delta} - \frac{1}{4} \mathcal{A}_{\alpha}^{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $		$\Delta_{2}^{#3}$ $\alpha\beta$
$\mathcal{A}_{2}^{\#1}{}_{lphaeta\chi}$	StrongGenSet[{1, 2}, GenSet[-(1,2)]]			$\begin{array}{c} -\frac{1}{8}\mathcal{A}_{\alpha\beta\chi} + \frac{1}{8}\mathcal{A}_{\alpha\chi\beta} + \frac{1}{8}\mathcal{A}_{\beta\alpha\chi} - \frac{1}{8}\mathcal{A}_{\beta\chi\alpha} + \frac{1}{4}\mathcal{A}_{\chi\alpha\beta} - \frac{1}{4}\mathcal{A}_{\chi\beta\alpha} - \frac{1}{4}\mathcal{A}_{\chi\beta\alpha} - \frac{3}{16}\eta_{\beta\chi}\mathcal{A}^{\delta}_{\alpha\delta} + \frac{3}{16}\eta_{\alpha\chi}\mathcal{A}^{\delta}_{\beta\delta} + \frac{3}{16}\eta_{\beta\chi}\mathcal{A}^{\delta}_{\delta\alpha} - \frac{3}{16}\eta_{\alpha\chi}\mathcal{A}^{\delta}_{\delta\beta} - \frac{3}{16}\eta_{\alpha\chi}\mathcal{A}^{\delta}_{\delta\beta} - \frac{3}{16}\mathcal{A}^{\delta}_{\beta\delta}n_{\alpha}n_{\chi} + \frac{3}{16}\mathcal{A}^{\delta}_{\delta\beta}n_{\alpha}n_{\chi} + \frac{3}{16}\mathcal{A}^{\delta}_{\alpha\delta}n_{\beta}n_{\chi} - \frac{3}{16}\mathcal{A}^{\delta}_{\delta\alpha}n_{\beta}n_{\chi} + \frac{1}{8}\mathcal{A}^{\delta}_{\beta\beta}n_{\alpha}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\beta\chi}n_{\alpha}n_{\delta} + \frac{1}{4}\mathcal{A}^{\delta}_{\chi\beta}n_{\alpha}n_{\delta} - \frac{1}{4}\mathcal{A}^{\delta}_{\chi\beta}n_{\alpha}n_{\delta} - \frac{1}{4}\mathcal{A}^{\delta}_{\chi\beta}n_{\alpha}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\beta\chi}n_{\alpha}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\chi\beta}n_{\alpha}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\alpha\gamma}n_{\beta}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\alpha\gamma}n_{\beta}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\alpha\gamma}n_{\beta}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\alpha\gamma}n_{\beta}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\alpha\gamma}n_{\beta}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\beta\alpha}n_{\gamma}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta\alpha}_{\beta\alpha}n_{\gamma}n_{\delta} - \frac{1}{8}\mathcal{A}^{\delta}_{\beta\alpha}n_{\alpha}n_{\alpha}n_{\alpha} - \frac{1}{8}\mathcal{A}^{\delta}_{\beta\alpha}n_{\alpha}n_{\alpha}n_{\alpha} - \frac{1}{8}\mathcal{A}^{\delta}_{\beta\alpha}$		Δ <sub>2</sub> - αβχ
$\mathcal{A}_{2}^{#2}{}_{\alpha\beta\chi}$	StrongGenSet[{1, 2}, GenSet[-(1,2)]]			$\begin{array}{l} \frac{1}{3}   \mathcal{R}_{\alpha\beta\chi} + \frac{1}{3}   \mathcal{R}_{\alpha\chi\beta} - \frac{1}{3}   \eta_{\beta\chi}   \mathcal{R}_{\alpha}^{\ \delta} - \frac{1}{3}   \mathcal{R}_{\beta\alpha\chi} - \frac{1}{3}   \mathcal{R}_{\beta\chi\alpha} + \frac{1}{3}   \eta_{\alpha\chi}   \mathcal{R}_{\beta}^{\ \delta} + \\ \frac{1}{6}   \eta_{\beta\chi}   \mathcal{R}^{\delta}_{\ \alpha\delta} - \frac{1}{6}   \eta_{\alpha\chi}   \mathcal{R}^{\delta}_{\ \beta\delta} + \frac{1}{6}   \eta_{\beta\chi}   \mathcal{R}^{\delta}_{\ \delta\alpha} - \frac{1}{6}   \eta_{\alpha\chi}   \mathcal{R}^{\delta}_{\ \delta\beta} - \frac{1}{3}   \mathcal{R}_{\beta}^{\ \delta}   n_{\alpha}   n_{\chi} + \\ \frac{1}{6}   \mathcal{R}^{\delta}_{\ \beta\delta}   n_{\alpha}   n_{\chi} + \frac{1}{6}   \mathcal{R}^{\delta}_{\ \delta\beta}   n_{\alpha}   n_{\chi} + \frac{1}{3}   \mathcal{R}^{\delta}_{\ \delta\alpha}   n_{\beta}   n_{\chi} - \frac{1}{6}   \mathcal{R}^{\delta}_{\ \alpha\delta}   n_{\beta}   n_{\chi} - \\ \frac{1}{6}   \mathcal{R}^{\delta}_{\ \delta\alpha}   n_{\beta}   n_{\chi} + \frac{1}{3}   \mathcal{R}^{\delta}_{\beta\beta}   n_{\alpha}   n_{\zeta} + \frac{1}{3}   \mathcal{R}^{\delta}_{\beta\chi}   n_{\alpha}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta}_{\beta\chi}   n_{\alpha}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta}_{\ \delta\alpha}   n_{\beta}   n_{\chi} + \frac{1}{3}   \mathcal{R}^{\delta}_{\beta\chi}   n_{\alpha}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta}_{\beta\chi}   n_{\alpha}   n_{\delta} - \frac{1}{3}  \mathcal{R}^{\delta}_{\beta\chi}   n_{\alpha}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta}_{\ \delta\alpha}   n_{\alpha}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta}_{\beta\chi}   n_{\alpha}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta}_{\alpha\chi}   n_{\beta}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta}_{\alpha\chi}   n_{\beta}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta}_{\chi\alpha}   n_{\beta}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta}_{\alpha\chi}   n_{\beta}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta}_{\chi\alpha}   n_{\beta}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta}_{\alpha\chi}   n_{\beta}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\alpha}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\beta}   n_{\delta} - \\ \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\alpha}   n_{\delta} + \frac{1}{3}   \mathcal{R}^{\delta\epsilon}_{\alpha\chi}   n_{\alpha}   n_{\delta} - \frac{1}{3}   R$		$\Delta_{2}^{#2}$ $\alpha\beta\chi$

 $\frac{1}{6} \eta_{\alpha\chi} \mathcal{A}^{\delta}_{\beta} n_{\delta} n_{\epsilon} - \frac{1}{6} \eta_{\beta\chi} \mathcal{A}^{\delta\epsilon}_{\alpha} n_{\delta} n_{\epsilon} + \frac{1}{6} \eta_{\alpha\chi} \mathcal{A}^{\delta\epsilon}_{\beta} n_{\delta} n_{\epsilon} -$ 

StrongGenSet[{1, 2, 3}, GenSet[(1,2), (2,3)]]  $\frac{1}{6} \mathcal{A}_{\alpha\beta\chi} + \frac{1}{6} \mathcal{A}_{\alpha\chi\beta} - \frac{1}{15} \eta_{\beta\chi} \mathcal{A}_{\alpha\delta}^{\delta} + \frac{1}{6} \mathcal{A}_{\beta\alpha\chi} + \frac{1}{6} \mathcal{A}_{\beta\chi\alpha}$ 

 $\mathcal{A}_{3}^{\#1}_{\alpha\beta\chi}$ 

 $\frac{1}{3} \mathcal{A}_{\beta}^{\delta \epsilon} n_{\alpha} n_{\chi} n_{\delta} n_{\epsilon} + \frac{1}{6} \mathcal{A}_{\beta}^{\delta \epsilon} n_{\alpha} n_{\chi} n_{\delta} n_{\epsilon} + \frac{1}{6} \mathcal{A}_{\beta}^{\delta \epsilon} n_{\alpha} n_{\chi} n_{\delta} n_{\epsilon} +$ 

 $\frac{1}{3} \mathcal{A}_{\alpha}^{\delta \epsilon} n_{\beta} n_{\chi} n_{\delta} n_{\epsilon}^{-\frac{1}{6}} \mathcal{A}_{\alpha}^{\delta \epsilon} n_{\beta} n_{\chi} n_{\delta} n_{\epsilon}^{-\frac{1}{6}} \mathcal{A}_{\alpha}^{\delta \epsilon} n_{\beta} n_{\chi} n_{\delta} n_{\epsilon}$ 

 $\frac{1}{15} \eta_{\alpha\chi} \mathcal{A}_{\beta}^{\delta} + \frac{1}{6} \mathcal{A}_{\chi\alpha\beta} + \frac{1}{6} \mathcal{A}_{\chi\beta\alpha} - \frac{1}{15} \eta_{\alpha\beta} \mathcal{A}_{\chi\delta}^{\delta} - \frac{1}{15} \eta_{\beta\chi} \mathcal{A}_{\alpha\delta}^{\delta}$ 

 $\frac{1}{15} \eta_{\alpha\beta} \mathcal{A}^{\delta}_{\delta\chi} + \frac{1}{15} \mathcal{A}^{\delta}_{\chi\delta} n_{\alpha} n_{\beta} + \frac{1}{15} \mathcal{A}^{\delta}_{\chi\delta} n_{\alpha} n_{\beta} + \frac{1}{15} \mathcal{A}^{\delta}_{\delta\chi} n_{\alpha} n_{\beta} +$ 

 $\frac{1}{15} \mathcal{A}_{\alpha \delta}^{\delta} n_{\beta} n_{\chi} + \frac{1}{15} \mathcal{A}_{\alpha \delta}^{\delta} n_{\beta} n_{\chi} + \frac{1}{15} \mathcal{A}_{\delta \alpha}^{\delta} n_{\beta} n_{\chi} - \frac{1}{6} \mathcal{A}_{\beta \chi}^{\delta} n_{\alpha} n_{\delta} - \frac{1}{6} \mathcal{A}_{\beta \chi}^{\delta} n_{\delta} n_{\delta} - \frac{1}{6} \mathcal{A}_{\beta \chi}^{\delta} n_{\delta} n_$ 

 $\frac{1}{6} \, \mathcal{A}^{\delta}_{\chi\beta} \, n_{\alpha} \, n_{\delta} + \frac{1}{15} \, \eta_{\beta\chi} \, \mathcal{A}^{\delta\epsilon}_{\epsilon} \, n_{\alpha} \, n_{\delta} - \frac{1}{6} \, \mathcal{A}_{\alpha\chi}^{\phantom{\alpha}\delta} \, n_{\beta} \, n_{\delta} - \frac{1}{6} \, \mathcal{A}_{\alpha\chi}^{\phantom{\alpha}\delta} \, n_{\delta} + \frac{1}{6} \, \mathcal{A}_{\alpha\chi}^{\phantom{\alpha}\delta} \, n_{\delta} \, n_{\delta} - \frac{1}{6} \, \mathcal{A}_{\alpha\chi}^{\phantom{\alpha}\delta} \, n_{\delta} \, n_{\delta} - \frac{1}{6} \, \mathcal{A}_{\alpha\chi}^{\phantom{\alpha}\delta} \, n_{\delta} \, n_{\delta} + \frac{1}{6} \, \mathcal{A}_{\alpha\chi}^{\phantom{\alpha}\delta$ 

 $\frac{1}{15} \eta_{\alpha\chi} \, \mathcal{A}^{\delta\epsilon}_{\quad \epsilon} n_{\beta} n_{\delta}^{-\frac{1}{6}} \, \mathcal{A}_{\alpha\beta}^{\quad \delta} n_{\chi} n_{\delta}^{-\frac{1}{6}} \, \mathcal{A}_{\alpha\beta}^{\quad \delta} n_{\chi} n_{\delta}^{-\frac{1}{6}} \, \mathcal{A}_{\beta\alpha}^{\quad \delta} n_{\chi} n_{\delta}^{-\frac{1}{6}}$ 

 $\frac{1}{6} \mathcal{A}_{\beta \alpha}^{\delta} n_{\chi} n_{\delta} - \frac{1}{6} \mathcal{A}_{\alpha\beta}^{\delta} n_{\chi} n_{\delta} - \frac{1}{6} \mathcal{A}_{\beta\alpha}^{\delta} n_{\chi} n_{\delta} + \frac{1}{15} \eta_{\alpha\beta} \mathcal{A}_{\epsilon}^{\delta\epsilon} n_{\chi} n_{\delta} - \frac{1}{15} \eta_{\alpha\beta} n$ 

 $\frac{1}{5} \,\, \mathcal{A}^{\delta \epsilon}_{\phantom{\delta \epsilon} \epsilon} \,\, n_{\alpha} \,\, n_{\beta} \,\, n_{\chi} \,\, n_{\delta} + \frac{1}{15} \,\, \eta_{\beta \chi} \,\, \mathcal{A}^{\delta \,\, \epsilon}_{\phantom{\delta \delta} \delta} \,\, n_{\alpha} \,\, n_{\epsilon} + \frac{1}{15} \,\, \eta_{\beta \chi} \,\, \mathcal{A}^{\delta \epsilon}_{\phantom{\delta \delta} \delta} \,\, n_{\alpha} \,\, n_{\epsilon} +$ 

 $\frac{1}{15} \; \eta_{\alpha\chi} \; \mathcal{A}^{\delta \; \epsilon} \; n_{\beta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\chi} \; \mathcal{A}^{\delta \epsilon} \; n_{\beta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\beta} \; \mathcal{A}^{\delta \; \epsilon} \; n_{\chi} \; n_{\epsilon} +$ 

 $\frac{1}{15} \; \eta_{\alpha\beta} \; \mathcal{A}^{\delta\epsilon}_{\quad \delta} \; n_{\chi} \; n_{\epsilon} - \frac{1}{5} \; \mathcal{A}^{\delta}_{\quad \delta} \; n_{\alpha} \; n_{\beta} \; n_{\chi} \; n_{\epsilon} - \frac{1}{5} \; \mathcal{A}^{\delta\epsilon}_{\quad \delta} \; n_{\alpha} \; n_{\beta} \; n_{\chi} \; n_{\epsilon} +$ 

 $\frac{1}{15} \; \eta_{\beta\chi} \; \mathcal{A}_{\alpha}^{\;\;\delta\epsilon} \; n_{\delta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\chi} \; \mathcal{A}_{\beta}^{\;\;\delta\epsilon} \; n_{\delta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\beta} \; \mathcal{A}_{\chi}^{\;\;\delta\epsilon} \; n_{\delta} \; n_{\epsilon} +$ 

 $\frac{1}{15} \; \eta_{\beta\chi} \; \mathcal{A}^{\delta \; \epsilon}_{\;\; \alpha} \; n_{\delta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\chi} \; \mathcal{A}^{\delta \; \epsilon}_{\;\; \beta} \; n_{\delta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\beta} \; \mathcal{A}^{\delta \; \epsilon}_{\;\; \chi} \; n_{\delta} \; n_{\epsilon} +$ 

 $\frac{1}{15} \; \eta_{\beta\chi} \; \mathcal{A}^{\delta\epsilon}_{\quad \alpha} \; n_{\delta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\chi} \; \mathcal{A}^{\delta\epsilon}_{\quad \beta} \; n_{\delta} \; n_{\epsilon} + \frac{1}{15} \; \eta_{\alpha\beta} \; \mathcal{A}^{\delta\epsilon}_{\quad \chi} \; n_{\delta} \; n_{\epsilon} +$ 

 $\frac{1}{5} \; \eta_{\beta\chi} \; \mathcal{A}^{\delta\epsilon\phi} \; n_{\alpha} \; n_{\delta} \; n_{\epsilon} \; n_{\phi} - \frac{1}{5} \; \eta_{\alpha\chi} \; \mathcal{A}^{\delta\epsilon\phi} \; n_{\beta} \; n_{\delta} \; n_{\epsilon} \; n_{\phi} -$ 

 $\frac{1}{5} \eta_{\alpha\beta} \mathcal{A}^{\delta\epsilon\phi} n_{\chi} n_{\delta} n_{\epsilon} n_{\phi} - \frac{2}{5} \mathcal{A}^{\delta\epsilon\phi} n_{\alpha} n_{\beta} n_{\chi} n_{\delta} n_{\epsilon} n_{\phi}$ 

 $\frac{4}{15} \, \mathcal{A}_{\chi}^{\,\,\delta\epsilon} \, n_{\alpha} \, n_{\beta} \, n_{\delta} \, n_{\epsilon} + \frac{4}{15} \, \mathcal{A}_{\,\,\chi}^{\,\,\delta\epsilon} \, n_{\alpha} \, n_{\beta} \, n_{\delta} \, n_{\epsilon} + \frac{4}{15} \, \mathcal{A}_{\,\,\chi}^{\,\,\delta\epsilon} \, n_{\alpha} \, n_{\beta} \, n_{\delta} \, n_{\epsilon} +$ 

 $\frac{4}{15}\;\mathcal{A}_{\beta}^{\;\delta\epsilon}\;n_{\alpha}\;n_{\chi}\;n_{\delta}\;n_{\epsilon}+\frac{4}{15}\;\mathcal{A}_{\;\;\beta}^{\delta\;\epsilon}\;n_{\alpha}\;n_{\chi}\;n_{\delta}\;n_{\epsilon}+\frac{4}{15}\;\mathcal{A}_{\;\;\beta}^{\delta\epsilon}\;n_{\alpha}\;n_{\chi}\;n_{\delta}\;n_{\epsilon}+$ 

 $\frac{4}{15} \, \mathcal{R}_{\alpha}^{\ \delta \epsilon} \, n_{\beta} \, n_{\chi} \, n_{\delta} \, n_{\epsilon} + \frac{4}{15} \, \mathcal{R}_{\ \alpha}^{\delta \ \epsilon} \, n_{\beta} \, n_{\chi} \, n_{\delta} \, n_{\epsilon} + \frac{4}{15} \, \mathcal{R}_{\ \alpha}^{\delta \epsilon} \, n_{\beta} \, n_{\chi} \, n_{\delta} \, n_{\epsilon} -$ 

 $\frac{1}{6} \mathcal{A}_{\beta \chi}^{\delta} n_{\alpha} n_{\delta}^{-\frac{1}{6}} \mathcal{A}_{\chi\beta}^{\delta} n_{\alpha} n_{\delta}^{-\frac{1}{6}} \mathcal{A}_{\chi\beta}^{\delta} n_{\alpha} n_{\delta}^{-\frac{1}{6}} \mathcal{A}_{\beta\chi}^{\delta} n_{\alpha} n_{\delta}^{-\frac{1}{6}}$ 

 $\frac{1}{6} \mathcal{A}_{\chi\alpha}^{\phantom{\chi\alpha}\delta} n_{\beta} n_{\delta}^{\phantom{\delta}-\frac{1}{6}} \mathcal{A}_{\chi\alpha}^{\phantom{\chi\alpha}} n_{\beta} n_{\delta}^{\phantom{\delta}-\frac{1}{6}} \mathcal{A}_{\alpha\chi}^{\phantom{\delta}} n_{\beta} n_{\delta}^{\phantom{\delta}-\frac{1}{6}} \mathcal{A}_{\chi\alpha}^{\phantom{\delta}} n_{\beta} n_{\delta}^{\phantom{\delta}+}$ 

 $\frac{1}{15} \eta_{\alpha\chi} \, \mathcal{A}^{\delta}_{\beta\delta} - \frac{1}{15} \eta_{\alpha\beta} \, \mathcal{A}^{\delta}_{\chi\delta} - \frac{1}{15} \eta_{\beta\chi} \, \mathcal{A}^{\delta}_{\delta\alpha} - \frac{1}{15} \eta_{\alpha\chi} \, \mathcal{A}^{\delta}_{\delta\beta} -$ 

 $\frac{1}{15} \mathcal{A}_{\beta \delta}^{\delta} n_{\alpha} n_{\chi} + \frac{1}{15} \mathcal{A}_{\beta \delta}^{\delta} n_{\alpha} n_{\chi} + \frac{1}{15} \mathcal{A}_{\delta \beta}^{\delta} n_{\alpha} n_{\chi} +$