## Field kinematics

Basic conventions							
Minkowski metric tensor	Totally antisymmetric tensor	Momentum	Norm	Frame			
$\eta_{\mu  u}$	$\epsilon \eta_{\mu \nu  ho \sigma}$	$k^{\mu}$	$k^2 == k_\mu k^\mu$	$n^{\mu} == \frac{k^{\mu}}{k}$			

## Fundamental fields

Fundamental field	Symmetries	Decomposition in SO(3) irreps	Source
$\Gamma_{lphaeta\chi}$	Symmetry[3, $\Gamma^{\bullet 1 \bullet 2 \bullet 3}$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b, \bullet 3 \rightarrow -c \}$ , StrongGenSet[{}, GenSet[]]]	$ \begin{array}{c} -\frac{1}{2} \; \eta_{\alpha\chi} \; \Gamma_{1}^{\#1} \; _{\beta} + \frac{1}{2} \; \eta_{\alpha\beta} \; \Gamma_{1}^{\#2} \; _{\chi} + \frac{4}{3} \; \Gamma_{2}^{\#2} \; _{\alpha\beta\chi} + \frac{1}{2} \; \Gamma_{2}^{\#2} \; _{\alpha\beta\chi} + \Gamma_{3}^{\#1} \; _{\alpha\beta\chi} + \frac{1}{3} \; \eta_{\beta\chi} \; \Gamma_{1}^{\#6} \; _{\alpha} - \frac{1}{6} \; \eta_{\alpha\chi} \; \Gamma_{1}^{\#6} \; _{\beta} - \frac{1}{6} \; \eta_{\alpha\beta} \; \Gamma_{1}^{\#4} \; _{\chi} + \frac{1}{15} \; \eta_{\alpha\chi} \; \Gamma_{1}^{\#4} \; _{\chi} + \Gamma_{1}^{\#2} \; _{\beta\chi} \; _{\alpha} + \frac{1}{3} \; \eta_{\alpha\chi} \; \Gamma_{0}^{\#3} \; _{\alpha} \; _{\alpha} + \frac{1}{3} \; \Gamma_{2}^{\#2} \; _{\alpha\beta\chi} + \Gamma_{3}^{\#1} \; _{\alpha\beta\chi} \; _{\alpha} + \frac{1}{3} \; \Gamma_{2}^{\#2} \; _{\alpha\beta\chi} + \Gamma_{3}^{\#1} \; _{\alpha\beta\chi} \; _{\alpha} + \frac{1}{3} \; \Gamma_{1}^{\#2} \; _{\alpha\chi} \; _{\alpha\beta} + \frac{1}{3} \; _{\alpha\chi} \; _{\alpha\beta} + \frac{1}{3} \; \Gamma_{1}^{\#2} \; _{\alpha\chi} \; _{\alpha\beta} + \frac{1}{3} \; _{\alpha\chi} \; _{\alpha\beta} \; _{\alpha\chi} + \frac{1}{3} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\beta} + \frac{1}{3} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\beta} \; _{\alpha\chi} + \frac{1}{3} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\chi} + \frac{1}{3} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\chi} + \frac{1}{3} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\chi} \; _{\alpha\chi} + \frac{1}{3} \; _{\alpha\chi} \; _$	$\Delta_{lphaeta\chi}$
SO(3) irrons			

## SO(3) irreps

SO(3) irrep	Symmetries	Expansion in terms of the fundamental field	Source
Γ#1 <sub>0</sub> +	Symmetry[0, $\Gamma_{0+}^{\#1}$ , {}, StrongGenSet[{}, GenSet[]]]	$-\frac{1}{2} \Gamma^{\alpha}_{\alpha}{}^{\beta} n_{\beta} + \frac{1}{2} \Gamma^{\alpha\beta}_{\alpha} n_{\beta}$	Δ <sub>0</sub> <sup>#1</sup>
Γ#2 0 <sup>+</sup>	Symmetry[0, $\Gamma_{0+}^{2}$ , {}, StrongGenSet[{}, GenSet[]]]	$\Gamma^{lphaeta\chi}$ $n_{lpha}$ $n_{eta}$ $n_{\chi}$	Δ <sub>0</sub> <sup>#2</sup>
Γ <sub>0</sub> <sup>#3</sup>	Symmetry[0, $\Gamma_{0+}^{3}$ , {}, StrongGenSet[{}, GenSet[]]]	$\Gamma^{\alpha\beta}_{\ \beta} \ n_{\alpha} + \Gamma^{\alpha\beta}_{\ \alpha} \ n_{\beta} + \Gamma^{\alpha\beta}_{\ \alpha} \ n_{\beta} - 3 \ \Gamma^{\alpha\beta\chi} \ n_{\alpha} \ n_{\beta} \ n_{\chi}$	Δ <sub>0</sub> <sup>#3</sup>
Γ#4 0+	Symmetry[0, $\Gamma_{0+}^{4}$ , {}, StrongGenSet[{}, GenSet[]]]	$\Gamma^{\alpha\beta}_{\beta} n_{\alpha} - \frac{1}{2} \Gamma^{\alpha\beta}_{\alpha} n_{\beta} - \frac{1}{2} \Gamma^{\alpha\beta}_{\alpha} n_{\beta}$	Δ <sub>0</sub> <sup>#4</sup>
Γ <sub>0</sub> <sup>#1</sup>	Symmetry[0, $\Gamma_{0}^{#1}$ , {}, StrongGenSet[{}, GenSet[]]]	$\epsilon \eta_{\alpha\beta\chi\delta} \Gamma^{\alpha\beta\chi} n^{\delta}$	$\Delta_0^{#1}$
$\Gamma_{1}^{\#1}{}_{lphaeta}$	Symmetry[2, $\Gamma_{1^{+}}^{\#1} \bullet 1 \bullet 2$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$ , StrongGenSet[ $\{ 1, 2 \}$ , GenSet[ $-(1,2)$ ]]]	$\frac{1}{4} \Gamma_{\alpha\beta}^{} n_{\chi} - \frac{1}{4} \Gamma_{\alpha\beta}^{} n_{\chi} - \frac{1}{4} \Gamma_{\beta\alpha}^{\alpha} n_{\chi} + \frac{1}{4} \Gamma_{\beta\alpha}^{\alpha} n_{\chi} - \frac{1}{4} \Gamma_{\beta\alpha}^{\beta} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{4} \Gamma_{\beta\alpha}^{\beta} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{4} \Gamma_{\alpha\beta}^{\beta} n_{\alpha\alpha} n_{\chi} n_{\delta} + \frac{1}{4} \Gamma_{\alpha\alpha}^{\beta} n_{\beta\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\alpha}^{\beta} n_{\beta\alpha} n_{\beta\alpha} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma$	$\Delta_{1}^{\#1}{}_{lphaeta}$
$\Gamma_{1}^{\#2}{}_{\alpha\beta}$	Symmetry[2, $\Gamma_{1}^{\#2} \bullet 1 \bullet 2$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$ , StrongGenSet[ $\{ 1, 2 \}$ , GenSet[ $-(1,2)$ ]]]	$\frac{1}{2} \Gamma^{\chi}_{\alpha\beta} n_{\chi} - \frac{1}{2} \Gamma^{\chi}_{\beta\alpha} n_{\chi} + \frac{1}{2} \Gamma^{\chi}_{\beta} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{2} \Gamma^{\chi\delta}_{\beta} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{2} \Gamma^{\chi\delta}_{\alpha} n_{\beta} n_{\chi} n_{\delta} + \frac{1}{2} \Gamma^{\chi\delta}_{\alpha} n_{\beta} n_{\chi} n_{\delta}$	$\Delta_{1}^{\#2}{}_{lphaeta}$
1 + αβ	StrongGenSet[{1, 2}, GenSet[-(1,2)]]]	$-\frac{1}{2} \Gamma_{\alpha\beta}^{} n_{\chi} - \frac{1}{2} \Gamma_{\alpha\beta}^{} n_{\chi} + \frac{1}{2} \Gamma_{\beta\alpha}^{\alpha} n_{\chi} - \Gamma_{\beta\alpha}^{\alpha} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{2} \Gamma_{\beta\alpha}^{\beta} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{2} \Gamma_{\beta\alpha}^{\beta} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{2} \Gamma_{\beta\alpha}^{\beta} n_{\alpha} n_{\chi} n_{\delta} + \frac{1}{2} \Gamma_{\alpha\beta}^{\beta} n_{\alpha} n_{\chi} n_{\delta} + \Gamma_{\alpha\beta}^{\beta} n_{\alpha\beta} n_{\chi} n_{\delta} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\beta\beta} n_{\chi} n_{\delta} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\beta\alpha} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\beta} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{2} \Gamma_{\alpha\alpha}^{\beta} n_{\gamma} n_{\gamma}$	$\Delta_{1}^{#3}{}_{\alpha\beta}$
$\Gamma_{1}^{\#1}{}_{\alpha}$	Symmetry[1, $\Gamma_{1}^{\#1} \bullet 1$ , $\{ \bullet 1 \rightarrow -a \}$ , StrongGenSet[ $\{ \}$ , GenSet[]]]	$-\frac{1}{2} \Gamma^{\beta}_{\alpha\beta} + \frac{1}{2} \Gamma^{\beta}_{\beta\alpha} - \frac{1}{2} \Gamma^{\beta}_{\beta}^{\chi} n_{\alpha} n_{\chi} + \frac{1}{2} \Gamma^{\beta\chi}_{\beta} n_{\alpha} n_{\chi} + \frac{1}{2} \Gamma^{\beta}_{\alpha}^{\chi} n_{\beta} n_{\chi} - \frac{1}{2} \Gamma^{\beta\chi}_{\alpha} n_{\beta} n_{\chi}$	$\Delta_{1}^{#1}{}_{\alpha}$
	Symmetry[1, $\Gamma_1^{\#2} \bullet 1$ , $\{ \bullet 1 \rightarrow -a \}$ , StrongGenSet[ $\{ \}$ , GenSet[]]]		$\Delta_{1}^{#2}$ $\alpha$
Γ <sub>1</sub> - α	Symmetry[1, $\Gamma_1^{\#3} \bullet 1$ , $\{ \bullet 1 \rightarrow -a \}$ , StrongGenSet[ $\{ \}$ , GenSet[]]]	$\Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} - 3 \Gamma^{\beta\chi\delta} n_{\alpha} n_{\beta} n_{\chi} n_{\delta}$	Δ <sub>1</sub> - α
$\Gamma_{1}^{\#4}$	Symmetry[1, $\Gamma_1^{\#4} \bullet 1$ , $\{ \bullet 1 \rightarrow -a \}$ , StrongGenSet[ $\{ \}$ , GenSet[]]]	$\Gamma_{\alpha\beta}^{\beta} + \Gamma_{\alpha\beta}^{\beta} + \Gamma_{\beta\alpha}^{\beta} - \Gamma_{\chi}^{\beta\chi} n_{\alpha} n_{\beta} - \Gamma_{\beta}^{\beta\chi} n_{\alpha} n_{\chi} - \Gamma_{\alpha}^{\beta\chi} n_{\alpha} n_{\chi} - \Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} - \Gamma_{\alpha}^{\beta\chi} n_{\gamma} - \Gamma_{\alpha}^{\beta\chi} n_{\gamma} n_{\gamma} - \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} - \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} - \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} n_{\gamma} - \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} n_{\gamma} n_{\gamma} - \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} - \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} n_{$	$\Delta_{1}^{#4}$ $\alpha$
$\Gamma_{1}^{\#5}\alpha$	Symmetry[1, $\Gamma_1^{\#5} \bullet 1$ , $\{ \bullet 1 \rightarrow -a \}$ , StrongGenSet[ $\{ \}$ , GenSet[]]]	$\Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi}^{-\frac{1}{2}} \Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi}^{-\frac{1}{2}} \Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi}$	$\Delta_{1}^{#5}\alpha$
Γ <sup>#6</sup> <sub>1 α</sub>	Symmetry[1, $\Gamma_1^{\#6} \bullet 1$ , $\{ \bullet 1 \rightarrow -a \}$ , StrongGenSet[ $\{ \}$ , GenSet[]]]	$\Gamma_{\alpha\beta}^{\beta} - \frac{1}{2} \Gamma_{\alpha\beta}^{\beta} - \frac{1}{2} \Gamma_{\beta\alpha}^{\beta} - \Gamma_{\chi}^{\beta\chi} n_{\alpha} n_{\beta} + \frac{1}{2} \Gamma_{\beta}^{\beta\chi} n_{\alpha} n_{\chi} + \frac{1}{2} \Gamma_{\beta}^{\beta\chi} n_{\alpha} n_{\chi} - \Gamma_{\alpha}^{\beta\chi} n_{\beta} n_{\chi} + \frac{1}{2} \Gamma_{\alpha}^{\beta\chi} n_{\gamma} n_{\gamma} + \frac{1}{2} \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} + \frac{1}{2} \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} n_{\gamma} + \frac{1}{2} \Gamma_{\alpha}^{\gamma\chi} n_{\gamma} $	$\Delta_{1}^{\#6}{}_{\alpha}$
$\Gamma^{\#1}_{2^+ \alpha\beta}$	Symmetry[2, $\Gamma_{2^{+}}^{\#1} \bullet 1 \bullet 2$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$ , StrongGenSet[{1, 2}, GenSet[(1,2)]]]	$-\frac{1}{4} \Gamma_{\alpha\beta}^{ X} n_{\chi} + \frac{1}{4} \Gamma_{\alpha\beta}^{ X} n_{\chi} - \frac{1}{4} \Gamma_{\beta\alpha}^{ X} n_{\chi} + \frac{1}{4} \Gamma_{\beta\alpha}^{ X} n_{\chi} + \frac{1}{6} \eta_{\alpha\beta} \Gamma_{\chi}^{ X} n_{\delta} - \frac{1}{6} \eta_{\alpha\beta} \Gamma_{\chi}^{ X} n_{\delta} - \frac{1}{6} \Gamma_{\chi}^{ X} n_{\alpha} n_{\beta} n_{\delta} + \frac{1}{6} \Gamma_{\chi}^{ X} n_{\alpha} n_{\beta} n_{\delta} + \frac{1}{4} \Gamma_{\beta}^{ X} n_{\alpha} n_{\beta} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\beta}^{ X} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\beta}^{ X} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha\beta}^{ X} n_{\gamma} $	$\Delta_{2}^{\#1}{}_{lphaeta}$
	Symmetry[2, $\Gamma_{2^{+}}^{\#2} \bullet 1 \bullet 2$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$ , StrongGenSet[ $\{ 1, 2 \}$ , GenSet[ $( 1, 2 )$ ]]]	$\frac{1}{2} \Gamma_{\alpha\beta}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\alpha\beta}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\beta\alpha}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\beta\alpha}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\alpha\beta}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\alpha\beta}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\beta\alpha}^{\ X} n_{\chi} - \frac{1}{3} \eta_{\alpha\beta} \Gamma^{\chi\delta}_{\ \delta} n_{\chi} + \frac{1}{3} \Gamma^{\chi\delta}_{\ \delta} n_{\alpha} n_{\beta} n_{\chi} - \frac{1}{3} \eta_{\alpha\beta} \Gamma^{\chi\delta}_{\ \chi} n_{\delta} - \frac{1}{3} \eta_{\alpha\beta} \Gamma^{\chi\delta}_{\ \chi} n_{\delta} + \frac{1}{3} \Gamma^{\chi\delta}_{\ \chi} n_{\alpha} n_{\beta} n_{\delta} + \frac{1}{3} \Gamma^{\chi\delta}_{\ \chi} n_{\alpha} n_{\beta} n_{\chi} n_{\delta} - \Gamma^{\chi\delta}_{\ \beta} n_{\alpha} n_{\chi} n_{\delta} - \Gamma^{\chi\delta}_{\ \alpha} n_{\beta} n_{\chi} n_{\delta} + \eta_{\alpha\beta} \Gamma^{\chi\delta\epsilon}_{\ \chi} n_{\chi} n_{\delta} n_{\epsilon} + 2 \Gamma^{\chi\delta\epsilon}_{\ \lambda} n_{\alpha} n_{\beta} n_{\chi} n_{\delta} n_{\epsilon}$	$\Delta^{\#2}_{2^+  lphaeta}$
Γ <sup>#3</sup> <sub>2</sub> + αβ	Symmetry[2, $\Gamma_{2^{+}}^{\#3} \bullet 1 \bullet 2$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$ , StrongGenSet[{1, 2}, GenSet[(1,2)]]]	$-\frac{1}{4} \Gamma_{\alpha\beta}^{\ X} n_{\chi} - \frac{1}{4} \Gamma_{\alpha\beta}^{\ X} n_{\chi} - \frac{1}{4} \Gamma_{\beta\alpha}^{\ X} n_{\chi} - \frac{1}{4} \Gamma_{\beta\alpha}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\alpha\beta}^{\ X} n_{\chi} + \frac{1}{2} \Gamma_{\beta\alpha}^{\ X} n_{\chi} - \frac{1}{3} \eta_{\alpha\beta} \Gamma_{\alpha\beta}^{\ X\delta} n_{\chi} + \frac{1}{3} \Gamma_{\alpha\beta}^{\ X\delta} n_{\chi} + \frac{1}{6} \eta_{\alpha\beta} \Gamma_{\chi}^{\ X\delta} n_{\delta} + \frac{1}{6} \eta_{\alpha\beta} \Gamma_{\chi}^{\ X\delta} n_{\delta} - \frac{1}{6} \Gamma_{\chi}^{\ X\delta} n_{\alpha} n_{\beta} n_{\delta} + \frac{1}{2} \Gamma_{\beta}^{\ X\delta} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \Gamma_{\beta}^{\ X\delta} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \Gamma_{\alpha}^{\ X\delta} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \Gamma_{\alpha}^{\ X\delta} n_{\alpha} n_{\chi} n_{\delta} - \frac{1}{4} \Gamma_{\alpha}^{\ X\delta} n_{\beta} n_{\chi} n_{\delta} - \frac{1}{4} \Gamma_{\alpha}^{\ X\delta} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha}^{\ X\delta} n_{\gamma} n_{\gamma} n_{\delta} - \frac{1}{4} \Gamma_{\alpha}^{\ X\delta} n_{\gamma} n_{$	$\Delta_{2}^{\#3}{}_{lphaeta}$
Γ <sub>2</sub> <sup>#1</sup> αβχ	Symmetry[3, $\Gamma_2^{\#1} \bullet 1 \bullet 2 \bullet 3$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b, \bullet 3 \rightarrow -c \}$ , StrongGenSet[ $\{ 1, 2 \}$ , GenSet[ $-(1,2)$ ]]]	$-\frac{1}{8} \Gamma_{\alpha\beta\chi} + \frac{1}{8} \Gamma_{\alpha\chi\beta} + \frac{1}{8} \Gamma_{\beta\alpha\chi} - \frac{1}{8} \Gamma_{\beta\chi\alpha} + \frac{1}{4} \Gamma_{\chi\alpha\beta} - \frac{3}{16} \Gamma_{\beta\chi}^{\delta} \Gamma_{\alpha\delta}^{\delta} + \frac{3}{16} \Gamma_{\alpha\chi}^{\delta} \Gamma_{\beta\delta}^{\delta} + \frac{3}{16} \Gamma_{\beta\chi}^{\delta} \Gamma_{\delta\alpha}^{\delta} - \frac{3}{16} \Gamma_{\alpha\chi}^{\delta} \Gamma_{\delta\beta}^{\delta} - \frac{3}{16} \Gamma_{\beta\delta}^{\delta} \Gamma_{\alpha}^{\delta} \Gamma$	$\Delta_{2}^{\#1}{}_{lphaeta\chi}$
Γ <sup>#2</sup> <sub>2 αβχ</sub>	Symmetry[3, $\Gamma_2^{\#2} \bullet 1 \bullet 2 \bullet 3$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b, \bullet 3 \rightarrow -c \}$ , StrongGenSet[ $\{ 1, 2 \}$ , GenSet[ $-(1,2)$ ]]]	$\frac{1}{3} \Gamma_{\alpha\beta\chi} + \frac{1}{3} \Gamma_{\alpha\chi\beta} - \frac{1}{3} \eta_{\beta\chi} \Gamma_{\alpha}^{\delta} - \frac{1}{3} \Gamma_{\beta\alpha\chi} - \frac{1}{3} \Gamma_{\beta\chi\alpha} + \frac{1}{3} \eta_{\alpha\chi} \Gamma_{\beta}^{\delta} + \frac{1}{6} \eta_{\beta\chi} \Gamma_{\alpha\delta}^{\delta} - \frac{1}{6} \eta_{\alpha\chi} \Gamma_{\beta\delta}^{\delta} + \frac{1}{6} \eta_{\beta\chi} \Gamma_{\delta\alpha}^{\delta} - \frac{1}{6} \eta_{\alpha\chi} \Gamma_{\beta\delta}^{\delta} - \frac{1}{6} \eta_{\alpha\chi} \Gamma_{\delta\beta}^{\delta} - \frac{1}{3} \Gamma_{\beta\delta}^{\delta} \eta_{\alpha} \eta_{\chi} + \frac{1}{6} \Gamma_{\beta\delta}^{\delta} \eta_{\alpha} \eta_{\chi} + \frac{1}{3} \Gamma_{\alpha\lambda}^{\delta} \eta_{\alpha} \eta_{\chi} - \frac{1}{6} \Gamma_{\alpha\lambda}^{\delta} \eta_{\alpha} \eta_{\alpha} - \frac{1}{3} \Gamma_{\alpha\lambda}^{\delta} \eta_{\alpha} - \frac{1}{3} \Gamma_{\alpha\lambda}^{\delta} \eta_{\alpha} \eta_{\alpha} - \frac{1}{3} \Gamma_{\alpha\lambda}^{\delta} \eta_{\alpha} - \frac{1}{3} \Gamma_{\alpha\lambda}^{\delta} \eta_{\alpha} - \frac{1}{3} \Gamma_{\alpha\lambda}^{\delta} \eta_{\alpha} - \frac{1}{3} \Gamma_{\alpha$	$\Delta_{2}^{\#2}{}_{lphaeta\chi}$
Γ <sup>#1</sup> <sub>3</sub> - <sub>αβχ</sub>	Symmetry[3, $\Gamma_{3}^{\#1} \bullet 1 \bullet 2 \bullet 3$ , $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b, \bullet 3 \rightarrow -c \}$ , StrongGenSet[{1, 2, 3}, GenSet[(1,2), (2,3)]]]	$\frac{1}{6} \Gamma_{\alpha\beta\chi} + \frac{1}{6} \Gamma_{\alpha\chi\beta} - \frac{1}{15} \eta_{\beta\chi} \Gamma_{\alpha\delta}^{\delta} + \frac{1}{6} \Gamma_{\beta\alpha\chi} + \frac{1}{6} \Gamma_{\beta\chi\alpha} - \frac{1}{15} \eta_{\alpha\beta} \Gamma_{\delta}^{\delta} + \frac{1}{6} \Gamma_{\chi\alpha\beta} + \frac{1}{6} \Gamma_{\chi\alpha\beta} + \frac{1}{6} \Gamma_{\chi\alpha\beta} - \frac{1}{15} \eta_{\alpha\beta} \Gamma_{\alpha\delta}^{\delta} - \frac{1}{15} \eta_{\alpha\beta} \Gamma_{\delta\delta}^{\delta} - \frac{1}{15} \Gamma_{\alpha\delta}^{\delta} \eta_{\alpha} \eta_{\alpha} + \frac{1}{15} \Gamma_{\delta\delta}^{\delta} \eta_{\alpha} \eta_{\beta} + \frac{1}{15} \Gamma_{\delta\delta}^{\delta} \eta_{\alpha} \eta_{\alpha} - \frac{1}{6} \Gamma_{\delta\lambda}^{\delta} \eta_{\alpha} \eta_{\alpha} - \frac{1}{6} \Gamma_{\delta\lambda}^{\delta$	$\Delta_3^{\#1}{}_{lphaeta\chi}$