

Fundamental field	Symmetries	Decomposition into SO(3) irrep(s)	Source
$f_{\alpha\beta}$	Symmetry[2, $f^{\bullet 1 \bullet 2}$ , {●1 → -a, ●2 → -b}, StrongGenSet[{}], GenSet[]]]	$\frac{1}{3} \eta_{\alpha\beta} f_{0+}^{\#1} + f_{1+ \alpha\beta}^{\#1} + f_{2+ \alpha\beta}^{\#1} + f_{1- \beta}^{\#1} n_{\alpha} + f_{1- \alpha}^{\#2} n_{\beta} - \frac{1}{3} f_{0+}^{\#1} n_{\alpha} n_{\beta} + f_{0+}^{\#2} n_{\alpha} n_{\beta}$	$\tau_{\alpha\beta}$
SO(3) irrep	Symmetries	Expansion in terms of the fundamental field	Source SO(3) irrep
$f_{0+}^{\#1}$	Symmetry[0, $f_{0+}^{\#1}$ , {}, StrongGenSet[{}], GenSet[]]]	$f_{\alpha}^{\alpha} - f^{\alpha\beta} n_{\alpha} n_{\beta}$	$\tau_{0+}^{\#1}$
$f_{0+}^{\#2}$	Symmetry[0, $f_{0+}^{\#2}$ , {}, StrongGenSet[{}], GenSet[]]]	$f^{\alpha\beta} n_{\alpha} n_{\beta}$	$\tau_{0+}^{\#2}$
$f_{1+ \alpha\beta}^{\#1}$	Symmetry[2, $f_{1+}^{\#1 \bullet 1 \bullet 2}$ , {●1 → -a, ●2 → -b}, StrongGenSet[{1, 2}], GenSet[-(1,2)]]]	$\frac{f_{\alpha\beta}}{2} - \frac{f_{\beta\alpha}}{2} + \frac{1}{2} f_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} f_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} f_{\alpha}^{\chi} n_{\beta} n_{\chi} + \frac{1}{2} f_{\alpha}^{\chi} n_{\beta} n_{\chi}$	$\tau_{1+ \alpha\beta}^{\#1}$
$f_{1- \alpha}^{\#1}$	Symmetry[1, $f_{1-}^{\#1 \bullet 1}$ , {●1 → -a}, StrongGenSet[{}], GenSet[]]]	$f_{\alpha}^{\beta} n_{\beta} - f^{\beta\chi} n_{\alpha} n_{\beta} n_{\chi}$	$\tau_{1- \alpha}^{\#1}$
$f_{1- \alpha}^{\#2}$	Symmetry[1, $f_{1-}^{\#2 \bullet 1}$ , {●1 → -a}, StrongGenSet[{}], GenSet[]]]	$f_{\alpha}^{\beta} n_{\beta} - f^{\beta\chi} n_{\alpha} n_{\beta} n_{\chi}$	$\tau_{1- \alpha}^{\#2}$
$f_{2+ \alpha\beta}^{\#1}$	Symmetry[2, $f_{2+}^{\#1 \bullet 1 \bullet 2}$ , {●1 → -a, ●2 → -b}, StrongGenSet[{1, 2}], GenSet[(1,2)]]]	$\frac{f_{\alpha\beta}}{2} + \frac{f_{\beta\alpha}}{2} - \frac{1}{3} \eta_{\alpha\beta} f_{\chi}^{\chi} + \frac{1}{3} f_{\chi}^{\chi} n_{\alpha} n_{\beta} - \frac{1}{2} f_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} f_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} f_{\alpha}^{\chi} n_{\beta} n_{\chi} - \frac{1}{2} f_{\alpha}^{\chi} n_{\beta} n_{\chi} + \frac{1}{3} \eta_{\alpha\beta} f^{\chi\delta} n_{\chi} n_{\delta} + \frac{2}{3} f^{\chi\delta} n_{\alpha} n_{\beta} n_{\chi} n_{\delta}$	$\tau_{2+ \alpha\beta}^{\#1}$