

Basic conventions				
Minkowski metric tensor	Totally antisymmetric tensor	Four-momentum	Four-momentum norm	Massive rest-frame
$\eta_{\mu\nu}$	$\epsilon\eta_{\mu\nu\rho\sigma}$	$k^\mu$	$k^2 == k_\mu \ k^\mu$	$n^\mu == \frac{k^\mu}{k}$

Fundamental field	Symmetries	Decomposition in SO(3) irreps	Source
$h_{\alpha\beta\chi}$	Symmetry[3, $h^{\bullet 1\bullet 2\bullet 3}$ , { $\bullet 1 \rightarrow$ -a, $\bullet 2 \rightarrow$ -b, $\bullet 3 \rightarrow$ -c}, StrongGenSet[{1, 2, 3}, GenSet[(1,2), (2,3)]]]	$h^{\#1}_{3^{-}\alpha\beta\chi} + \frac{1}{15} \ \eta_{\beta\chi} \ h^{\#2}_{1^{-}\alpha} + \frac{1}{15} \ \eta_{\alpha\chi} \ h^{\#2}_{1^{-}\beta} + \frac{1}{15} \ \eta_{\alpha\beta} \ h^{\#2}_{1^{-}\chi} + \frac{1}{9} \ \eta_{\beta\chi} \ h^{\#2}_{0^{+}} n_{\alpha} + \frac{1}{3} \ h^{\#1}_{2^{+}\beta\chi} \ n_{\alpha} +$ $\frac{1}{9} \ \eta_{\alpha\chi} \ h^{\#2}_{0^{+}} n_{\beta} + \frac{1}{3} \ h^{\#1}_{2^{+}\alpha\chi} \ n_{\beta} - \frac{1}{15} \ h^{\#2}_{1^{-}\chi} \ n_{\alpha} \ n_{\beta} + \frac{1}{3} \ h^{\#1}_{1^{-}\chi} \ n_{\alpha} \ n_{\beta} + \frac{1}{9} \ \eta_{\alpha\beta} \ h^{\#2}_{0^{+}} n_{\chi} + \frac{1}{3} \ h^{\#1}_{2^{+}\alpha\beta} \ n_{\chi} -$ $\frac{1}{15} \ h^{\#2}_{1^{-}\beta} \ n_{\alpha} \ n_{\chi} + \frac{1}{3} \ h^{\#1}_{1^{-}\beta} \ n_{\alpha} \ n_{\chi} - \frac{1}{15} \ h^{\#2}_{1^{-}\alpha} \ n_{\beta} \ n_{\chi} + \frac{1}{3} \ h^{\#1}_{1^{-}\alpha} \ n_{\beta} \ n_{\chi} - \frac{1}{3} \ h^{\#2}_{0^{+}} n_{\alpha} \ n_{\beta} \ n_{\chi} + h^{\#1}_{0^{+}} n_{\alpha} \ n_{\beta} \ n_{\chi}$	$\mathcal{F}_{\alpha\beta\chi}$

SO(3) irrep	Symmetries	Expansion in terms of the fundamental field	Source
$h^{\#1}_{0^{+}}$	Symmetry[0, $h^{\#1}_{0^{+}}$ , {}, StrongGenSet[{}], GenSet[]]	$h_{\alpha\beta\chi} \ n^{\alpha} \ n^{\beta} \ n^{\chi}$	$\mathcal{F}^{\#1}_{0^{+}}$
$h^{\#2}_{0^{+}}$	Symmetry[0, $h^{\#2}_{0^{+}}$ , {}, StrongGenSet[{}], GenSet[]]	$3 \ h_{\alpha}^{\beta}{}_{\beta} \ n^{\alpha} - 3 \ h_{\alpha\beta\chi} \ n^{\alpha} \ n^{\beta} \ n^{\chi}$	$\mathcal{F}^{\#2}_{0^{+}}$
$h^{\#1}_{1^{-}\alpha}$	Symmetry[1, $h^{\#1}_{1^{-}\bullet 1}$ , { $\bullet 1 \rightarrow$ -a}, StrongGenSet[{}], GenSet[]]	$3 \ h_{\alpha\beta\chi} \ n^{\beta} \ n^{\chi} - 3 \ h_{\beta\chi\delta} \ n_{\alpha} \ n^{\beta} \ n^{\chi} \ n^{\delta}$	$\mathcal{F}^{\#1}_{1^{-}\alpha}$
$h^{\#2}_{1^{-}\alpha}$	Symmetry[1, $h^{\#2}_{1^{-}\bullet 1}$ , { $\bullet 1 \rightarrow$ -a}, StrongGenSet[{}], GenSet[]]	$3 \ h_{\alpha}^{\beta}{}_{\beta} - 3 \ h_{\beta}^{\chi}{}_{\chi} \ n_{\alpha} \ n^{\beta} - 3 \ h_{\alpha\beta\chi} \ n^{\beta} \ n^{\chi} + 3 \ h_{\beta\chi\delta} \ n_{\alpha} \ n^{\beta} \ n^{\chi} \ n^{\delta}$	$\mathcal{F}^{\#2}_{1^{-}\alpha}$
$h^{\#1}_{2^{+}\alpha\beta}$	Symmetry[2, $h^{\#1}_{2^{+}\bullet 1\bullet 2}$ , { $\bullet 1 \rightarrow$ -a, $\bullet 2 \rightarrow$ -b}, StrongGenSet[{1, 2}, GenSet[(1,2)]]]	$3 \ h_{\alpha\beta\chi} \ n^{\chi} - \eta_{\alpha\beta} \ h_{\chi}^{\delta}{}_{\delta} \ n^{\chi} + h_{\chi}^{\delta}{}_{\delta} \ n_{\alpha} \ n_{\beta} \ n^{\chi} - 3 \ h_{\beta\chi\delta} \ n_{\alpha} \ n^{\chi} \ n^{\delta} - 3 \ h_{\alpha\chi\delta} \ n_{\beta} \ n^{\chi} \ n^{\delta} + \eta_{\alpha\beta} \ h_{\chi\delta\epsilon} \ n^{\chi} \ n^{\delta} \ n^{\epsilon} + 2 \ h_{\chi\delta\epsilon} \ n_{\alpha} \ n_{\beta} \ n^{\chi} \ n^{\delta} \ n^{\epsilon}$	$\mathcal{F}^{\#1}_{2^{+}\alpha\beta}$
$h^{\#1}_{3^{-}\alpha\beta\chi}$	Symmetry[3, $h^{\#1}_{3^{-}\bullet 1\bullet 2\bullet 3}$ , { $\bullet 1 \rightarrow$ -a, $\bullet 2 \rightarrow$ -b, $\bullet 3 \rightarrow$ -c}, StrongGenSet[{1, 2, 3}, GenSet[(1,2), (2,3)]]]	$h_{\alpha\beta\chi} \ - \frac{1}{5} \ \eta_{\beta\chi} \ h_{\alpha}^{\delta}{}_{\delta} - \frac{1}{5} \ \eta_{\alpha\chi} \ h_{\beta}^{\delta}{}_{\delta} - \frac{1}{5} \ \eta_{\alpha\beta} \ h_{\chi}^{\delta}{}_{\delta} + \frac{1}{5} \ h_{\chi}^{\delta}{}_{\delta} \ n_{\alpha} \ n_{\beta} + \frac{1}{5} \ h_{\beta}^{\delta}{}_{\delta} \ n_{\alpha} \ n_{\chi} + \frac{1}{5} \ h_{\alpha}^{\delta}{}_{\delta} \ n_{\beta} \ n_{\chi} - h_{\beta\chi\delta} \ n_{\alpha} \ n^{\delta} + \frac{1}{5} \ \eta_{\beta\chi} \ h_{\delta}^{\epsilon}{}_{\epsilon} \ n_{\alpha} \ n^{\delta} -$ $h_{\alpha\chi\delta} \ n_{\beta} \ n^{\delta} + \frac{1}{5} \ \eta_{\alpha\chi} \ h_{\delta}^{\epsilon}{}_{\epsilon} \ n_{\beta} \ n^{\delta} - h_{\alpha\beta\delta} \ n_{\chi} \ n^{\delta} + \frac{1}{5} \ \eta_{\alpha\beta} \ h_{\delta}^{\epsilon}{}_{\epsilon} \ n_{\chi} \ n^{\delta} - \frac{3}{5} \ h_{\delta}^{\epsilon}{}_{\epsilon} \ n_{\alpha} \ n_{\beta} \ n_{\chi} \ n^{\delta} + \frac{1}{5} \ \eta_{\beta\chi} \ h_{\alpha\delta\epsilon} \ n^{\delta} \ n^{\epsilon} +$ $\frac{1}{5} \ \eta_{\alpha\chi} \ h_{\beta\delta\epsilon} \ n^{\delta} \ n^{\epsilon} + \frac{1}{5} \ \eta_{\alpha\beta} \ h_{\chi\delta\epsilon} \ n^{\delta} \ n^{\epsilon} + \frac{4}{5} \ h_{\chi\delta\epsilon} \ n_{\alpha} \ n_{\beta} \ n^{\delta} \ n^{\epsilon} + \frac{4}{5} \ h_{\beta\delta\epsilon} \ n_{\alpha} \ n_{\chi} \ n^{\delta} \ n^{\epsilon} + \frac{4}{5} \ h_{\alpha\delta\epsilon} \ n_{\beta} \ n_{\chi} \ n^{\delta} \ n^{\epsilon} -$ $\frac{1}{5} \ \eta_{\beta\chi} \ h_{\delta\epsilon\phi} \ n_{\alpha} \ n^{\delta} \ n^{\epsilon} \ n^{\phi} - \frac{1}{5} \ \eta_{\alpha\chi} \ h_{\delta\epsilon\phi} \ n_{\beta} \ n^{\delta} \ n^{\epsilon} \ n^{\phi} - \frac{1}{5} \ \eta_{\alpha\beta} \ h_{\delta\epsilon\phi} \ n_{\chi} \ n^{\delta} \ n^{\epsilon} \ n^{\phi} - \frac{2}{5} \ h_{\delta\epsilon\phi} \ n_{\alpha} \ n_{\beta} \ n_{\chi} \ n^{\delta} \ n^{\epsilon} \ n^{\phi}$	$\mathcal{F}^{\#1}_{3^{-}\alpha\beta\chi}$