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^μ	$k^2 == k_\mu\,k^\mu$	$n^\mu == \frac{k^\mu}{k}$

Fundamental field	Symmetries	Decomposition in SO(3) irreps	Source
$h_{\alpha\beta\chi}$	Symmetry[3, $h^{\bullet 1\bullet 2\bullet 3}$, $\{\bullet 1\to -a,\ \bullet 2\to -b,\ \bullet 3\to -c\}$, 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, $h^{\#1}_{1^-\bullet 1}$, $\{\bullet 1\to -a\}$, 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, $h^{\#2}_{1^-\bullet 1}$, $\{\bullet 1\to -a\}$, 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, $h^{\#1}_{2^+\bullet 1\bullet 2}$, $\{\bullet 1\to -a,\ \bullet 2\to -b\}$, 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, $h^{\#1}_{3^-\bullet 1\bullet 2\bullet 3}$, $\{\bullet 1\to -a,\ \bullet 2\to -b,\ \bullet 3\to -c\}$, StrongGenSet[{1, 2, 3}, GenSet[(1,2), (2,3)]]]	$h_{\alpha\beta\chi} - \frac{1}{5}\,\eta_{\beta\chi}\,h_{\alpha\ \ \delta}^{\ \delta} - \frac{1}{5}\,\eta_{\alpha\chi}\,h_{\beta\ \ \delta}^{\ \delta} - \frac{1}{5}\,\eta_{\alpha\beta}\,h_{\chi\ \ \delta}^{\ \delta} + \frac{1}{5}\,h_{\chi\ \ \delta}^{\ \delta}\,n_\alpha\,n_\beta + \frac{1}{5}\,h_{\beta\ \ \delta}^{\ \delta}\,n_\alpha\,n_\chi + \frac{1}{5}\,h_{\alpha\ \ \delta}^{\ \delta}\,n_\beta\,n_\chi - h_{\beta\chi\delta}\,n_\alpha\,n^\delta + \frac{1}{5}\,\eta_{\beta\chi}\,h_{\delta\ \ \epsilon}^{\ \epsilon}\,n_\alpha\,n^\delta - h_{\alpha\chi\delta}\,n_\beta\,n^\delta + \frac{1}{5}\,\eta_{\alpha\chi}\,h_{\delta\ \ \epsilon}^{\ \epsilon}\,n_\beta\,n^\delta - h_{\alpha\beta\delta}\,n_\chi\,n^\delta + \frac{1}{5}\,\eta_{\alpha\beta}\,h_{\delta\ \ \epsilon}^{\ \epsilon}\,n_\chi\,n^\delta - \frac{3}{5}\,h_{\delta\ \ \epsilon}^{\ \epsilon}\,n_\alpha\,n_\beta\,n_\chi\,n^\delta + \frac{1}{5}\,\eta_{\beta\chi}\,h_{\alpha\delta\epsilon}\,n^\delta\,n^\epsilon + \frac{1}{5}\,\eta_{\alpha\chi}\,h_{\beta\delta\epsilon}\,n^\delta\,n^\epsilon + \frac{1}{5}\,\eta_{\alpha\beta}\,h_{\chi\delta\epsilon}\,n^\delta\,n^\epsilon + \frac{4}{5}\,h_{\chi\delta\epsilon}\,n_\alpha\,n_\beta\,n^\delta\,n^\epsilon + \frac{4}{5}\,h_{\beta\delta\epsilon}\,n_\alpha\,n_\chi\,n^\delta\,n^\epsilon + \frac{4}{5}\,h_{\alpha\delta\epsilon}\,n_\beta\,n_\chi\,n^\delta\,n^\epsilon - \frac{1}{5}\,\eta_{\beta\chi}\,h_{\delta\epsilon\phi}\,n_\alpha\,n^\delta\,n^\epsilon\,n^\phi - \frac{1}{5}\,\eta_{\alpha\chi}\,h_{\delta\epsilon\phi}\,n_\beta\,n^\delta\,n^\epsilon\,n^\phi - \frac{1}{5}\,\eta_{\alpha\beta}\,h_{\delta\epsilon\phi}\,n_\chi\,n^\delta\,n^\epsilon\,n^\phi - \frac{2}{5}\,h_{\delta\epsilon\phi}\,n_\alpha\,n_\beta\,n_\chi\,n^\delta\,n^\epsilon\,n^\phi$	$\mathcal{F}^{\#1}_{3^-\ \alpha\beta\chi}$