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

Fundamental field | Symmetries

- arraarrierie	ai neiu Symmetries		Source
$\omega_{lphaeta\chi}$	Symmetry[3, $\omega^{\bullet 1 \bullet 2 \bullet 3}$, $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b, \bullet 3 \rightarrow -c \}$, StrongGenSet[{1, 2}, GenSet[-(1,2)]]]	$ \frac{1}{2} \eta_{\beta \chi} \omega_{1^{-}\alpha}^{\#1} + \frac{1}{2} \eta_{\alpha \chi} \omega_{1^{-}\beta}^{\#1} + \frac{4}{3} \omega_{2^{-}\alpha\beta\chi}^{\#1} + \frac{1}{3} \eta_{\beta \chi} \omega_{0^{+}}^{\#1} n_{\alpha} + \omega_{1^{+}\beta\chi}^{\#1} n_{\alpha} + \omega_{2^{+}\beta\chi}^{\#1} n_{\alpha^{-}\frac{1}{3}} \eta_{\alpha \chi} \omega_{0^{+}}^{\#1} n_{\beta^{-}} $ $ \omega_{1^{+}\alpha\chi}^{\#1} n_{\beta^{-}} \omega_{2^{+}\alpha\chi}^{\#1} n_{\beta} + \omega_{1^{+}\alpha\beta}^{\#2} n_{\chi^{-}\frac{1}{2}} \omega_{1^{-}\beta}^{\#1} n_{\alpha} n_{\chi^{-}} \omega_{1^{-}\beta}^{\#2} n_{\alpha} n_{\chi^{+}\frac{1}{2}} \omega_{1^{-}\alpha}^{\#1} n_{\beta} n_{\chi^{+}} \omega_{1^{-}\alpha}^{\#2} n_{\beta} n_{\chi^{-}\frac{1}{6}} \epsilon \eta_{\alpha\beta\chi\delta} \omega_{0^{-}}^{\#1} n^{\delta} $	$\sigma_{lphaeta\chi}$
60(0)			le.
-	Symmetries	Expansion in terms of the fundamental field	Source
$\omega_0^{\sharp 1}$	Symmetry[0, $\omega_{0^+}^{\sharp 1}$, {}, StrongGenSet[{}, GenSet[]]]	$\left \omega_{lpha\;eta}^{\;\;eta}\;n^{lpha} ight $	$\sigma_{0}^{\#1}$
$\omega_0^{\#1}$	Symmetry[0, $\omega_0^{\#1}$, {}, StrongGenSet[{}, GenSet[]]]	$-\epsilon \eta_{\alpha\beta\chi\delta} \omega^{\beta\chi\delta} n^{\alpha}$	$\sigma_0^{\#1}$
$\omega_{1+\alpha\beta}$	Symmetry[2, $\omega_{1+}^{\#1} \bullet 1 \bullet 2$, $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$,	$-\frac{1}{2} \omega_{\alpha\chi\beta} n^{\chi} + \frac{1}{2} \omega_{\beta\chi\alpha} n^{\chi} - \frac{1}{2} \omega_{\beta\chi\delta} n_{\alpha} n^{\chi} n^{\delta} + \frac{1}{2} \omega_{\alpha\chi\delta} n_{\beta} n^{\chi} n^{\delta}$	$\sigma_{1^{+}lphaeta}^{\sharp1}$
	StrongGenSet[{1, 2}, GenSet[-(1,2)]]]	2 αχρ ₂ ρχα ₂ ρχο α ₂ αχο ρ	
$\omega_{1+\alpha\rho}$	Symmetry[2, $\omega_{1^{+}}^{\#2} \bullet 1 \bullet 2$, $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$,	$\omega_{\alpha\beta\chi} n^{\chi} + \omega_{\beta\chi\delta} n_{\alpha} n^{\chi} n^{\delta} - \omega_{\alpha\chi\delta} n_{\beta} n^{\chi} n^{\delta}$	$\sigma^{\#2}_{1^+lphaeta}$
	StrongGenSet[{1, 2}, GenSet[-(1,2)]]]	αβχ · · · · βχο · α · · · · · · αχο · β · · · ·	1 αβ
$\omega_{1-\alpha}^{\#1}$	Symmetry[1, $\omega_1^{\#1}^{\bullet 1}$, $\{\bullet 1 \rightarrow -a\}$, StrongGenSet[$\{\}$, GenSet[]	$]] - \omega_{\alpha\beta}^{\beta} + \omega_{\beta\chi}^{\chi} n_{\alpha} n^{\beta} + \omega_{\alpha\beta\chi} n^{\beta} n^{\chi}$	$\sigma_{1-\alpha}^{\#1}$
$\overline{\omega_{1-\alpha}^{\#2}}$	Symmetry[1, $\omega_1^{\#2} \bullet 1$, $\{ \bullet 1 \rightarrow -a \}$, StrongGenSet[$\{ \}$, GenSet[$\}$]] $\omega_{lphaeta\chi} \ n^eta \ n^\chi$	$\sigma_{1}^{\#2}{}_{\alpha}$
$\omega_{\gamma^{+}\alpha^{R}}$	Symmetry[2, $\omega_2^{\#1} \bullet 1 \bullet 2$, $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b \}$,	$-\frac{1}{2} \omega_{\alpha\chi\beta} n^{\chi} - \frac{1}{2} \omega_{\beta\chi\alpha} n^{\chi} - \frac{1}{3} \eta_{\alpha\beta} \omega_{\chi\delta}^{\delta} n^{\chi} + \frac{1}{3} \omega_{\chi\delta}^{\delta} n_{\alpha} n_{\beta} n^{\chi} + \frac{1}{2} \omega_{\beta\chi\delta} n_{\alpha} n^{\chi} n^{\delta} + \frac{1}{2} \omega_{\alpha\chi\delta} n_{\beta} n^{\chi} n^{\delta}$	$\sigma^{\sharp 1}_{2^+lphaeta}$
	StrongGenSet[{1, 2}, GenSet[(1,2)]]	2 αχβ 2 βχα 3 αβ αχ δ 3 αχ δαβ 2 αβχδα 2 αχδβ	2 ⁺ αβ
$\omega_2^{\sharp 1}{}_{lphaeta\chi}$	Symmetry[3, $\omega_2^{\#1} \bullet 1 \bullet 2 \bullet 3$, $\{ \bullet 1 \rightarrow -a, \bullet 2 \rightarrow -b, \bullet 3 \rightarrow -c \}$, StrongGenSet[$\{ 1, 2 \}$, GenSet[$-(1,2)$]]]	$\frac{1}{2} \omega_{\alpha\beta\chi} + \frac{1}{4} \omega_{\alpha\chi\beta} - \frac{3}{8} \eta_{\beta\chi} \omega_{\alpha}^{\ \delta} - \frac{1}{4} \omega_{\beta\chi\alpha} + \frac{3}{8} \eta_{\alpha\chi} \omega_{\beta}^{\ \delta} - \frac{3}{8} \omega_{\beta}^{\ \delta} - \frac{3}{8} \omega_{\beta}^{\ \delta} n_{\alpha} n_{\chi} + \frac{3}{8} \omega_{\alpha}^{\ \delta} n_{\beta} n_{\chi} + \frac{1}{4} \omega_{\beta\chi\delta} n_{\alpha} n^{\delta} + \frac{1}{2} \omega_{\beta\delta\chi} n_{\alpha} n^{\delta} + \frac{1}{4} \omega_{\chi\delta\beta} n_{\alpha} n^{\delta} - \frac{1}{4} \omega_{\alpha\chi\delta} n_{\beta} n^{\delta} - \frac{1}{2} \omega_{\alpha\delta\chi} n_{\beta} n^{\delta} - \frac{1}{4} \omega_{\chi\delta\alpha} n_{\beta} n^{\delta} - \frac{3}{8} \eta_{\alpha\chi} \omega_{\delta}^{\ \epsilon} n_{\beta} n^{\delta} - \frac{1}{2} \omega_{\alpha\beta\delta} n_{\chi} n^{\delta} - \frac{1}{4} \omega_{\alpha\lambda\delta} n_{\beta} n^{\delta} - \frac{3}{8} \eta_{\alpha\chi} \omega_{\beta\delta\epsilon} n^{\delta} n^{\delta} - \frac{3}{8} \omega_{\alpha\delta\epsilon} n_{\beta} n^{\delta} - \frac{1}{4} \omega_{\alpha\delta\beta} n_{\chi} n^{\delta} n^{\delta} - \frac{3}{8} \omega_{\alpha\delta\beta} n^{\delta} n^{\delta} n^{\delta} n^{\delta} - \frac{3}{8} \omega_{\alpha\delta\beta} n^{\delta} n^{\delta} n^{\delta} n^{\delta} n^{\delta} n^{\delta} - \frac{3}{8} \omega_{\alpha\delta\beta} n^{\delta} n^$	$\sigma_2^{\sharp 1}{}_{lphaeta\chi}$

Source

Decomposition in SO(3) irreps