Field kinematics

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 fields

Fundamental field	Symmetries	Decomposition in SO(3) irreps	Source
$\mathcal{B}_{\alpha\beta}$	Symmetry[2, $\mathcal{B}^{\bullet 1\bullet 2}$, {●1 → -a, ●2 → -b}, StrongGenSet[{1, 2}, GenSet[-(1,2)]]]	$\mathcal{B}^{\#1}_{1^+\,\alpha\beta}$ - $\mathcal{B}^{\#1}_{1^-\,\beta}\,n_{\alpha}$ + $\mathcal{B}^{\#1}_{1^-\,\alpha}\,n_{\beta}$	$\mathcal{J}_{\alpha\beta}$

SO(3) irreps

SO(3) irrep	Symmetries	Expansion in terms of the fundamental field	Source
$\mathcal{B}^{\#1}_{1^+\,\alpha\beta}$	Symmetry[2, $\mathcal{B}^{\#1\,\bullet 1\bullet 2}_{1^+}$, {●1 → -a, ●2 → -b}, StrongGenSet[{1, 2}, GenSet[-(1,2)]]]	$\mathcal{B}_{\alpha\beta} + \mathcal{B}_{\beta\chi}\,n_{\alpha}\,n^{\chi}$ - $\mathcal{B}_{\alpha\chi}\,n_{\beta}\,n^{\chi}$	$\mathcal{J}^{\#1}_{1^+\,\alpha\beta}$
$\mathcal{B}^{\#1}_{1^-\,\alpha}$	Symmetry[1, $\mathcal{B}^{\#1\,\bullet 1}_{1^-}$, {●1 → -a}, StrongGenSet[{}, GenSet[]]]	$\mathcal{B}_{\alpha\beta}\,n^{\beta}$	$\mathcal{J}^{\#1}_{1^-\,\alpha}$