Basic conventions

Field kinematics

Minkowski metric tensor Totally antisymmetric tensor Momentum Norm

Symmetry[0, $\mathcal{B}_{0+}^{\#1}$, {}, StrongGenSet[{}, GenSet[]]]

$$\left| k^2 == k_\mu k^\mu \right| n^\mu == \frac{k^\mu}{k}$$

$$n^{\mu} == \frac{1}{k}$$

 \mathcal{B}^{α} n_{α}

Decomposition in SO(3) irreps

Expansion in terms of the fundamental field

Source

Source

 $\left|\mathcal{J}_{1}^{\sharp_{1}}\right|_{lpha}$

Frame

Fundamental fields

Fundamental field | Symmetries

SO(3) irreps

SO(3) irrep Symmetries

 \mathcal{B}_{α}

 $\mathcal{B}_{0}^{\#1}$

 $\mathcal{B}_{1^{-}\alpha}^{\sharp 1}$

Symmetry[1, $\mathcal{B}^{\bullet 1}$, $\{\bullet 1 \rightarrow -a\}$, StrongGenSet[$\{\}$, GenSet[$\}$]] $\mathcal{B}_{1^{-}\alpha}^{\#1} + \mathcal{B}_{0^{+}}^{\#1} n_{\alpha}$

Symmetry[1, $\mathcal{B}_{1}^{\#1} \bullet 1$, $\{ \bullet 1 \rightarrow -a \}$, StrongGenSet[$\{ \}$, GenSet[$\} \}$] $\mathcal{B}_{\alpha} - \mathcal{B}^{\beta} n_{\alpha} n_{\beta}$