

# Field kinematics

Momentum	Norm	Frame
$k^\mu$	$k^2 == k_\mu k^\mu$	$n^\mu == \frac{k^\mu}{k}$

## Fundamental fields

Fundamental field	Symmetries	Decomposition in SO(3) irreps	Source
$\mathcal{B}_{\alpha\beta}$	StrongGenSet[{}], GenSet[[]]	$\frac{1}{3} \eta_{\alpha\beta} \mathcal{B}_{0^+}^{\#1} + \mathcal{B}_{1^+}^{\#1}{}_{\alpha\beta} + \mathcal{B}_{2^+}^{\#1}{}_{\alpha\beta} + \mathcal{B}_{1^-}^{\#1}{}_{\beta} n_\alpha + \mathcal{B}_{1^-}^{\#2}{}_{\alpha} n_\beta - \frac{1}{3} \mathcal{B}_{0^+}^{\#1} n_\alpha n_\beta + \mathcal{B}_{0^+}^{\#2} n_\alpha n_\beta$	$\mathcal{T}_{\alpha\beta}$

## SO(3) irreps

SO(3) irrep	Symmetries	Expansion in fundamental field	Source
$\mathcal{B}_{0^+}^{\#1}$	StrongGenSet[{}], GenSet[[]]	$\mathcal{B}^\alpha{}_\alpha - \mathcal{B}^{\alpha\beta} n_\alpha n_\beta$	$\mathcal{T}_{0^+}^{\#1}$
$\mathcal{B}_{0^+}^{\#2}$	StrongGenSet[{}], GenSet[[]]	$\mathcal{B}^{\alpha\beta} n_\alpha n_\beta$	$\mathcal{T}_{0^+}^{\#2}$
$\mathcal{B}_{1^+}^{\#1}{}_{\alpha\beta}$	StrongGenSet[{1, 2}], GenSet[-(1,2)][]	$\frac{\mathcal{B}_{\alpha\beta}}{2} - \frac{\mathcal{B}_{\beta\alpha}}{2} + \frac{1}{2} \mathcal{B}_\beta{}^\chi n_\alpha n_\chi - \frac{1}{2} \mathcal{B}^\chi{}_\beta n_\alpha n_\chi - \frac{1}{2} \mathcal{B}_\alpha{}^\chi n_\beta n_\chi + \frac{1}{2} \mathcal{B}^\chi{}_\alpha n_\beta n_\chi$	$\mathcal{T}_{1^+}^{\#1}{}_{\alpha\beta}$
$\mathcal{B}_{1^-}^{\#1}{}_\alpha$	StrongGenSet[{}], GenSet[[]]	$\mathcal{B}^\beta{}_\alpha n_\beta - \mathcal{B}^{\beta\chi} n_\alpha n_\beta n_\chi$	$\mathcal{T}_{1^-}^{\#1}{}_\alpha$
$\mathcal{B}_{1^-}^{\#2}{}_\alpha$	StrongGenSet[{}], GenSet[[]]	$\mathcal{B}_\alpha{}^\beta n_\beta - \mathcal{B}^{\beta\chi} n_\alpha n_\beta n_\chi$	$\mathcal{T}_{1^-}^{\#2}{}_\alpha$
$\mathcal{B}_{2^+}^{\#1}{}_{\alpha\beta}$	StrongGenSet[{1, 2}], GenSet[(1,2)][]	$\frac{\mathcal{B}_{\alpha\beta}}{2} + \frac{\mathcal{B}_{\beta\alpha}}{2} - \frac{1}{3} \eta_{\alpha\beta} \mathcal{B}^\chi{}_\chi + \frac{1}{3} \mathcal{B}^\chi{}_\chi n_\alpha n_\beta - \frac{1}{2} \mathcal{B}_\beta{}^\chi n_\alpha n_\chi - \frac{1}{2} \mathcal{B}^\chi{}_\beta n_\alpha n_\chi - \frac{1}{2} \mathcal{B}_\alpha{}^\chi n_\beta n_\chi - \frac{1}{2} \mathcal{B}^\chi{}_\alpha n_\beta n_\chi + \frac{1}{3} \eta_{\alpha\beta} \mathcal{B}^{\chi\delta} n_\chi n_\delta + \frac{2}{3} \mathcal{B}^{\chi\delta} n_\alpha n_\beta n_\chi n_\delta$	$\mathcal{T}_{2^+}^{\#1}{}_{\alpha\beta}$