

PSALTer kinematic panel

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

Fundamental fields

Fields	Symmetries	SO(3)	Sources
$\psi_{\alpha\beta}$	StrongGenSet[{1,2},GenSet[(1,2)]]	$\frac{1}{3} \ \eta_{\alpha\beta} \ 0^{\#1+} \psi + \frac{\#1}{2^+} \psi_{\alpha\beta} + \frac{\#1}{1^-} \psi_\beta \ n_\alpha + \frac{\#1}{1^-} \psi_\alpha \ n_\beta - \frac{1}{3} \ 0^{\#1+} \psi \ n_\alpha \ n_\beta + 0^{\#2+} \psi \ n_\alpha \ n_\beta$	$\chi_{\alpha\beta}$

SO(3) irreps

SO(3)	Symmetries	Expansion	Sources
$\frac{\#1}{0^+} \psi$	StrongGenSet[{},GenSet[]]	$\psi^\alpha_\alpha - \psi_{\alpha\beta} \ n^\alpha \ n^\beta$	$\frac{\#1}{0^+} \chi$
$\frac{\#2}{0^+} \psi$	StrongGenSet[{ },GenSet[]]	$\psi_{\alpha\beta} \ n^\alpha \ n^\beta$	$\frac{\#2}{0^+} \chi$
$\frac{\#1}{2^+} \psi_{\alpha\beta}$	StrongGenSet[{1,2},GenSet[(1,2)]]	$\psi_{\alpha\beta} - \frac{1}{3} \ \eta_{\alpha\beta} \ \psi^x_x + \frac{1}{3} \ \psi^x_x \ n_\alpha \ n_\beta - \psi_{\beta\chi} \ n_\alpha \ n^\chi - \psi_{\alpha\chi} \ n_\beta \ n^\chi + \frac{1}{3} \ \eta_{\alpha\beta} \ \psi_{\chi \ \delta} \ n^\chi \ n^\delta + \frac{2}{3} \ \psi_{\chi \ \delta} \ n_\alpha \ n_\beta \ n^\chi \ n^\delta$	$\frac{\#1}{2^+} \chi^{\alpha\beta}$
$\frac{\#1}{1^-} \psi_\alpha$	StrongGenSet[{},GenSet[]]	$\psi_{\alpha\beta} \ n^\beta - \psi_{\beta\chi} \ n_\alpha \ n^\beta \ n^\chi$	$\frac{\#1}{1^-} \chi_\alpha$