

Particle spectrograph

Wave operator and propagator

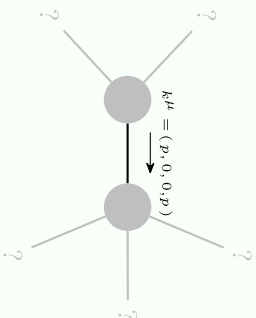
Spin-parity form	Covariant form	Multiplicities
$\mathcal{J}_{1^-}^{\#1\alpha} == 0$	$\partial_\beta \mathcal{J}^{\alpha\beta} == 0$	3
Total expected gauge generators: 3		

$\mathcal{J}_{1^+}^{\#1} + \alpha\beta$	$\mathcal{J}_{1^+}^{\#1}$	$\mathcal{J}_{1^-}^{\#1}$	$\mathcal{B}_{1^+}^{\#1} + \alpha\beta$	$\mathcal{B}_{1^+}^{\#1}$	$\mathcal{B}_{1^-}^{\#1}$
$\frac{3}{\gamma \kappa^2}$	0	0	$\frac{\gamma \kappa^2}{3}$	0	0
0	0	0	0	0	0

$$S = \iiint \left(\mathcal{B}^{\alpha\beta} \mathcal{J}_{\alpha\beta} + \frac{1}{3} \gamma (-2 \partial_\beta \mathcal{B}_{\alpha\chi} + \partial_\chi \mathcal{B}_{\alpha\beta}) \partial^\chi \mathcal{B}^{\alpha\beta} \right) [t, x, y, z] dz \, d^3 y \, d^3 x \, c$$

Massive and massless spectra

(No massive particles)



Massless particle

Poleresidue:	$\frac{1}{\gamma} > 0$
Polarisations:	1

Unitarity conditions

$$\gamma > 0$$