

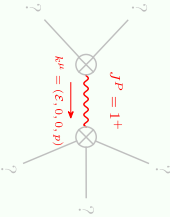
Particle spectrograph

Wave operator and propagator

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

	$\overset{\#1}{1^+} \mathcal{J}_{\alpha\beta}$	$\overset{\#1}{1^+} \mathcal{J}_\alpha$	$\overset{\#1}{1^+} \mathcal{B}_{\alpha\beta}$	$\overset{\#1}{1^+} \mathcal{B}_\alpha$	(No source constraints)
$\overset{\#1}{1^+} \mathcal{J}^{\alpha\beta}$	$\frac{1}{\delta + \frac{\gamma k^2}{3}}$	0	$\delta + \frac{\gamma k^2}{3}$	0	
$\overset{\#1}{1^+} \mathcal{J}^{\alpha}$	0	$\frac{1}{\delta}$	0	δ	

Massive and massless spectra

Poleresidue:	$\frac{3}{\gamma} > 0$	<div> <div>Massive particle</div>  </div>	(No massless particles)
Square mass:	$\frac{3 \delta}{\gamma} > 0$		
Spin:	1		
Parity:	Even		

Unitarity conditions

$$\gamma > 0 \ \&\& \ \delta < 0$$