Particle spectrograph

Wave operator and propagator

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

	$1^+\ \mathcal{T}_{\alpha\beta}$	$1^-\ \mathcal{T}_{\alpha}$
$1^+\ \mathcal{T}\dagger^{\alpha\beta}$	$\frac{1}{\delta + \frac{\gamma k^2}{3}}$	0
$1^-\ \mathcal{T}\dagger^{\alpha}$	0	$\frac{1}{\delta}$

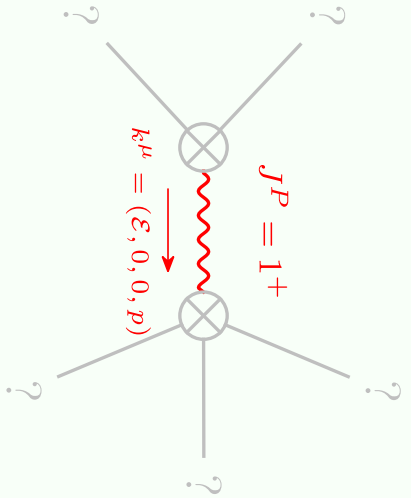
	$1^+\ \mathcal{B}_{\alpha\beta}$	$1^-\ \mathcal{B}_{\alpha}$
$1^+\ \mathcal{B}\dagger^{\alpha\beta}$	$\delta + \frac{\gamma k^2}{3}$	0
$1^-\ \mathcal{B}\dagger^{\alpha}$	0	δ

(No source constraints)

Massive and massless spectra

Parity:	Even
Spin:	1
Square mass:	$\frac{3\,\delta}{\gamma} > 0$
Poleresidue:	$\frac{3}{\gamma} > 0$

Massive particle



(No massless particles)

Unitarity conditions