Particle spectrograph

Wave operator and propagator

Spin-parity	form	Covariant form	Multiplicities
$0^+\, \mathcal{T}^{\#2}$	$=0$	$\partial_\beta \partial_\alpha \mathcal{T}^{\alpha\beta} == 0$	1
$1^-\, \mathcal{T}^{\#1}$	$=0$	$\partial_\chi \partial_\beta \partial^\alpha \mathcal{T}^{\beta\chi} == \frac{1}{2} \partial^\chi \partial_\beta \mathcal{T}^{\alpha\beta}$	3
Total expected gauge generators:			4

$$S == \int\int\int\int (h^{\alpha\beta}\ \mathcal{T}_{\alpha\beta} + \frac{1}{2}\,\alpha\,(\partial_\beta h^\chi{}_\chi\ \partial^\beta h^\alpha{}_\alpha + 2\ \partial_\alpha h^{\alpha\beta}\ \partial_\chi h_\beta{}^\chi - 2\ \partial^\beta h^\alpha{}_\alpha\ \partial_\chi h_\beta{}^\chi - \partial_\chi h_{\alpha\beta}\ \partial^\chi h^{\alpha\beta}))[t, x, y, z]\, dl\ z\ dl\ y\ dl\ x$$

Massive and massless spectra

(No particles)

Massless particle

Pole residue:	$-\frac{1}{\alpha} > 0$
Polarisations:	2

Unitarity conditions