Particle spectrograph

Wave operator and propagator

	$0^+{}^{\#1}\mathcal{T}$	$0^+{}^{\#2}\mathcal{T}$	$1^-{}^{\#1}\mathcal{T}_\alpha$	$1^-{}^{\#1}h_\alpha$	$0^+{}^{\#2}h$	$0^+{}^{\#1}h$	$2^+{}^{\#1}\mathcal{T}_{\alpha\beta}$	$2^+{}^{\#1}h_{\alpha\beta}$
$0^+{}^{\#1}\mathcal{T}$	$\frac{1}{\alpha\, k^2}$	$-\frac{\sqrt{3}}{\alpha\, k^2}$						
$0^+{}^{\#2}\mathcal{T}$	$-\frac{\sqrt{3}}{\alpha\, k^2}$	$\frac{\alpha-3\beta}{\alpha(\alpha-\beta)\, k^2}$						
$1^-{}^{\#1}\mathcal{T}^\alpha$			0					
$1^-{}^{\#1}h^\alpha$				0				
$0^+{}^{\#2}h$							$-\frac{\alpha\, k^2}{2}$	
$0^+{}^{\#1}h$								$-\frac{2}{\alpha\, k^2}$
$2^+{}^{\#1}h^{\alpha\beta}$	$-\frac{1}{2}(\alpha-3\beta)\, k^2$	$\frac{1}{2}\sqrt{3}(-\alpha+\beta)\, k^2$						
$2^+{}^{\#1}\mathcal{T}^{\alpha\beta}$	$\frac{1}{2}\sqrt{3}(-\alpha+\beta)\, k^2$	$\frac{1}{2}(-\alpha+\beta)\, k^2$						

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

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

Massive and massless spectra

(No particles)

Massless particle

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

Massless particle

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

Unitarity conditions