Particle spectrograph

Wave operator and propagator

Spin-parity form	Covariant form	Multiplicities
$\overset{\#2}{0^+}\mathcal{T}$ ==0	$\partial_\beta\partial_\alpha\mathcal{T}^{\alpha\beta} == 0$	1
$\overset{\#1}{1^-}\mathcal{T}^{\alpha}$ == 0	$\partial_\chi\partial_\beta\partial^\alpha\mathcal{T}^{\beta\chi} == \partial_\chi\partial^\chi\partial_\beta\mathcal{T}^{\alpha\beta}$	3
$\overset{\#1}{2^+}\mathcal{T}^{\alpha\beta}$ == 0 2	$\partial_\delta\partial_\chi\partial^\beta\partial^\alpha\mathcal{T}^{\chi\delta} + \partial_\delta\partial^\delta\partial^\beta\partial^\alpha\mathcal{T}^{\chi}{}_{\chi} + 3\,\partial_\delta\partial^\delta\partial_\chi\partial^\chi\mathcal{T}^{\alpha\beta} + \eta^{\alpha\beta}\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial_\chi\mathcal{T}^{\chi\delta} == 3\,\partial_\delta\partial^\delta\partial_\chi\partial^\alpha\mathcal{T}^{\beta\chi} + 3\,\partial_\delta\partial^\delta\partial_\chi\partial^\beta\mathcal{T}^{\alpha\chi} + \eta^{\alpha\beta}\,\partial_\epsilon\partial^\epsilon\partial_\delta\partial^\delta\mathcal{T}^{\chi}{}_{\chi}$	5
Total expected gauge generators:		9

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

$\overset{\#1}{2^+}\mathcal{T}\dagger^{\alpha\beta}$

0

$\overset{\#1}{2^+}\mathcal{T}_{\alpha\beta}$

	$\overset{\#1}{0^+}\mathcal{T}$	$\overset{\#2}{0^+}\mathcal{T}$
$\overset{\#1}{0^+}\mathcal{T}\dagger$	$-\frac{1}{3\,\alpha\,k^4}$	0
$\overset{\#2}{0^+}\mathcal{T}\dagger$	0	0

	$\overset{\#1}{0^+}h$	$\overset{\#2}{0^+}h$
$\overset{\#1}{0^+}h\dagger$	$-3\,\alpha\,k^4$	0
$\overset{\#2}{0^+}h\dagger$	0	0

$\overset{\#1}{2^+}h\dagger^{\alpha\beta}$

0

$\overset{\#1}{2^+}h_{\alpha\beta}$

$\overset{\#1}{1^-}\mathcal{T}\dagger^{\alpha}$

0

$\overset{\#1}{1^-}\mathcal{T}_{\alpha}$

$\overset{\#1}{1^-}h\dagger^{\alpha}$

0

$\overset{\#1}{1^-}h_{\alpha}$

Massive and massless spectra

(No particles) (No particles)

Unitarity conditions