

PSALTer results panel

$$S = \iiint \left(h^{\alpha\beta} \mathcal{T}_{\alpha\beta} + \alpha_1 \partial_\beta h^\chi_\chi \partial^\beta h^\alpha_\alpha + \alpha_1 \left(-2 \partial_\beta h_{\alpha\chi} + \partial_\chi h_{\alpha\beta} \right) \partial^\chi h^{\alpha\beta} \right) [t, x, y, z] dz dy dx dt$$

Wave operator

$$\begin{array}{cc} \begin{array}{c} \Theta^+ h^\perp \\ \Theta^+ h^\parallel \end{array} \dagger & \begin{array}{cc} \Theta^+ h^\perp & \Theta^+ h^\parallel \end{array} \\ \begin{array}{cc} \begin{array}{cc} 0 & \sqrt{3} \alpha_1 k^2 \\ \sqrt{3} \alpha_1 k^2 & 4 \alpha_1 k^2 \end{array} & \begin{array}{c} 1^- h^\perp_\alpha \\ 1^- h^\perp_\dagger^\alpha \end{array} \\ & \begin{array}{cc} 0 & 2^+ h^\parallel_{\alpha\beta} \\ 2^+ h^\parallel_\dagger^{\alpha\beta} & \alpha_1 k^2 \end{array} \end{array}$$

Saturated propagator

$$\begin{array}{cc} \begin{array}{c} \Theta^+ \mathcal{T}^\perp \\ \Theta^+ \mathcal{T}^\parallel \end{array} \dagger & \begin{array}{cc} \Theta^+ \mathcal{T}^\perp & \Theta^+ \mathcal{T}^\parallel \end{array} \\ \begin{array}{cc} \begin{array}{cc} -\frac{4}{3 \alpha_1 k^2} & \frac{1}{\sqrt{3} \alpha_1 k^2} \\ \frac{1}{\sqrt{3} \alpha_1 k^2} & 0 \end{array} & \begin{array}{c} 1^- \mathcal{T}^\perp_\alpha \\ 1^- \mathcal{T}^\perp_\dagger^\alpha \end{array} \\ & \begin{array}{cc} 0 & 2^+ \mathcal{T}^\parallel_{\alpha\beta} \\ 2^+ \mathcal{T}^\parallel_\dagger^{\alpha\beta} & \frac{1}{\alpha_1 k^2} \end{array} \end{array}$$

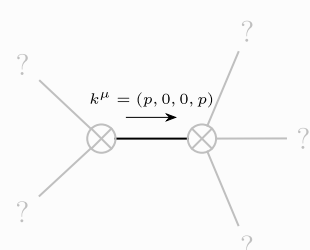
Source constraints

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

Massive spectrum

(There are no massive particles)

Massless spectrum



Massless particle

Pole residue:	$\frac{p^2}{\alpha_1} > 0$
Polarisations:	3

Gauge symmetries

(Not yet implemented in PSALTer)

Unitarity conditions

$$\alpha_1 > 0$$

Validity assumptions

(Not yet implemented in PSALTer)