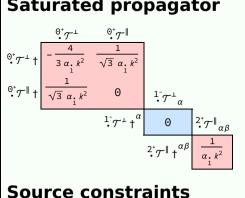# PSALTer results panel

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

Wave operator

	$\overset{0^+}{\bullet}h^\perp$	$\overset{0^+}{\bullet}h^\parallel$			
$\overset{0^+}{\bullet}h^\perp\dagger$	0	$\sqrt{3}\;\alpha_1\,k^2$			
$\overset{0^+}{\bullet}h^\parallel\dagger$	$\sqrt{3}\;\alpha_1\,k^2$	$4\,\alpha_1\,k^2$	$\overset{1^-}{\bullet}h^\perp{}_\alpha$		
		$\overset{1^-}{\bullet}h^\perp\dagger^\alpha$	0	$\overset{2^+}{\bullet}h^\parallel{}_{\alpha\beta}$	
			$\overset{2^+}{\bullet}h^\parallel\dagger^{\alpha\beta}$	$\alpha_1\,k^2$	

Saturated propagator

	$\overset{0^+}{\bullet}\mathcal{T}^\perp$	$\overset{0^+}{\bullet}\mathcal{T}^\parallel$			
$\overset{0^+}{\bullet}\mathcal{T}^\perp\dagger$	$-\dfrac{4}{3\,\alpha_1\,k^2}$	$\dfrac{1}{\sqrt{3}\;\alpha_1\,k^2}$			
$\overset{0^+}{\bullet}\mathcal{T}^\parallel\dagger$	$\dfrac{1}{\sqrt{3}\;\alpha_1\,k^2}$	0	$\overset{1^-}{\bullet}\mathcal{T}^\perp{}_\alpha$		
		$\overset{1^-}{\bullet}\mathcal{T}^\perp\dagger^\alpha$	0	$\overset{2^+}{\bullet}\mathcal{T}^\parallel{}_{\alpha\beta}$	
			$\overset{2^+}{\bullet}\mathcal{T}^\parallel\dagger^{\alpha\beta}$	$\dfrac{1}{\alpha_1\,k^2}$	

Source constraints

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

Massive spectrum

(No particles)

Massless spectrum

Massless particle

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

Unitarity conditions

$\alpha_1 > 0$