PSALTer results panel

$$\mathcal{S} == \int\int\int\int (\rho\,\varphi + h^{\alpha\beta}\,\mathcal{T}_{\alpha\beta} + \alpha_{\scriptscriptstyle 2}\,\partial_\alpha\varphi\,\partial^\alpha\varphi + \frac{1}{2}\,\alpha_{\scriptscriptstyle 1}\,(\partial_\beta h^\chi{}_\chi\,\partial^\beta h^\alpha{}_\alpha + 2\,\partial_\alpha h^{\alpha\beta}\,\partial_\chi h_\beta{}^\chi - 2\,\partial^\beta h^\alpha{}_\alpha\,\partial_\chi h_\beta{}^\chi - \partial_\chi h_{\alpha\beta}\,\partial^\chi h^{\alpha\beta}))[t, x, y, z]\,dz\,dy\,dx\,dt$$

Wave operator

	$0^+\!:\varphi$	$0^+\!:h^\perp$	$0^+\!:h^\parallel$	$1^-\!:h^\perp{}_\alpha$	$2^+\!:h^\parallel{}_{\alpha\beta}$
$0^+\!:\varphi\,\dagger$	$\alpha_{\scriptscriptstyle 2}\,k^2$	0	0		
$0^+\!:h^\perp\,\dagger$	0	0	0		
$0^+\!:h^\parallel\,\dagger$	0	0	$\alpha_{\scriptscriptstyle 1}\,k^2$		
$1^-\!:h^\perp\,\dagger^\alpha$				0	
$2^+\!:h^\parallel\,\dagger^{\alpha\beta}$					$-\frac{\alpha_{\scriptscriptstyle 1}\,k^2}{2}$

Saturated propagator

	$0^+\!:\rho$	$0^+\!:\mathcal{T}^\perp$	$0^+\!:\mathcal{T}^\parallel$	$1^-\!:\mathcal{T}^\perp{}_\alpha$	$2^+\!:\mathcal{T}^\parallel{}_{\alpha\beta}$
$0^+\!:\rho\,\dagger$	$\frac{1}{\alpha_{\scriptscriptstyle 2}\,k^2}$	0	0		
$0^+\!:\mathcal{T}^\perp\,\dagger$	0	0	0		
$0^+\!:\mathcal{T}^\parallel\,\dagger$	0	0	$\frac{1}{\alpha_{\scriptscriptstyle 1}\,k^2}$		
$1^-\!:\mathcal{T}^\perp\,\dagger^\alpha$				0	
$2^+\!:\mathcal{T}^\parallel\,\dagger^{\alpha\beta}$					$-\frac{2}{\alpha_{\scriptscriptstyle 1}\,k^2}$

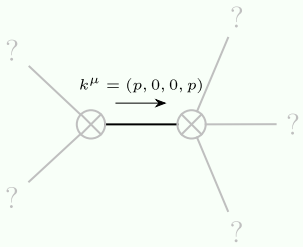
Source constraints

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

Massive spectrum

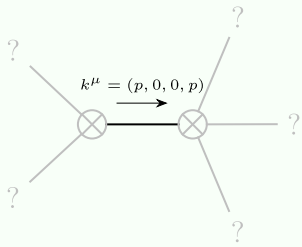
(No particles)

Massless spectrum



Massless particle

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



Massless particle

Pole residue:	$-\frac{p^2}{\alpha_{\scriptscriptstyle 1}} > 0$
Polarisations:	2

Unitarity conditions

$\alpha_{\scriptscriptstyle 1} < 0$ && $\alpha_{\scriptscriptstyle 2} > 0$