PSALTer results panel

$$S == \iiiint \left(\rho\,\varphi + h^{\alpha\beta}\;\mathcal{T}_{\alpha\beta} + \frac{1}{2}\,\alpha_2\,\partial_\alpha\varphi\,\partial^\alpha\varphi + \frac{1}{8}\,\alpha_1\left(12\,\partial_\alpha\partial^\alpha\varphi - 4\,\partial_\alpha h^\beta{}_\beta\,\partial^\alpha\varphi - 6\,\partial_\alpha\varphi\,\partial^\alpha\varphi + 4\,\partial^\alpha\varphi\,\partial_\beta h_\alpha{}^\beta - \right.\right.$$
$$4\,\partial_\beta\partial_\alpha h^{\alpha\beta} + 4\,\partial_\beta\partial^\beta h^\alpha{}_\alpha - \partial_\beta h^\chi{}_\chi\,\partial^\beta h^\alpha{}_\alpha + 2\,\partial^\beta h^\alpha{}_\alpha\,\partial_\chi h_\beta{}^\chi - 2\,\partial_\beta h_{\alpha\chi}\,\partial^\chi h^{\alpha\beta} + \partial_\chi h_{\alpha\beta}\,\partial^\chi h^{\alpha\beta}\Big) +$$
$$\alpha_5\left(-2\,\partial_\beta\partial_\alpha h^\chi{}_\chi\,\partial^\beta\partial^\alpha\varphi - 2\,\partial_\beta\partial_\alpha\varphi\,\partial^\beta\partial^\alpha\varphi + 2\,\partial^\beta\partial^\alpha\varphi\,\partial_\chi\partial_\alpha h_\beta{}^\chi + 2\,\partial^\beta\partial^\alpha\varphi\,\partial_\chi\partial_\beta h_\alpha{}^\chi - 2\,\partial^\beta\partial^\alpha\varphi\,\partial_\chi\partial^\chi h_{\alpha\beta} + \right.$$
$$2\,\partial_\alpha\partial^\alpha\varphi\left(\partial_\beta\partial^\beta\varphi - \partial_\chi\partial_\beta h^{\beta\chi} + \partial_\chi\partial^\chi h^\beta{}_\beta\right) - \partial_\chi\partial_\beta h^\delta{}_\delta\,\partial^\chi\partial^\beta h^\alpha{}_\alpha - 2\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\beta h_\chi{}^\delta - 2\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\chi h_\beta{}^\delta +$$
$$4\,\partial^\chi\partial^\beta h^\alpha{}_\alpha\,\partial_\delta\partial_\chi h_\beta{}^\delta + \partial_\beta\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\chi h^{\chi\delta} - 2\,\partial_\beta\partial^\beta h^\alpha{}_\alpha\,\partial_\delta\partial_\chi h^{\chi\delta} - \partial_\chi\partial^\chi h^{\alpha\beta}\,\partial_\delta\partial^\delta h_{\alpha\beta} +$$
$$4\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial^\delta h_{\beta\chi} - 2\,\partial^\chi\partial^\beta h^\alpha{}_\alpha\,\partial_\delta\partial^\delta h_{\beta\chi} + \partial_\beta\partial^\beta h^\alpha{}_\alpha\,\partial_\delta\partial^\delta h^\chi{}_\chi + \partial_\beta\partial_\alpha h_{\chi\delta}\,\partial^\delta\partial^\chi h^{\alpha\beta} -$$
$$\left.\left.\left. \partial_\chi\partial_\beta h_{\alpha\delta}\,\partial^\delta\partial^\chi h^{\alpha\beta} - \partial_\delta\partial_\beta h_{\alpha\chi}\,\partial^\delta\partial^\chi h^{\alpha\beta} + \partial_\delta\partial_\chi h_{\alpha\beta}\,\partial^\delta\partial^\chi h^{\alpha\beta}\right)\right)\right)[t,\ x,\ y,\ z]\,dz\,dy\,dx\,dt$$

Wave operator

Saturated propagator

Source constraints

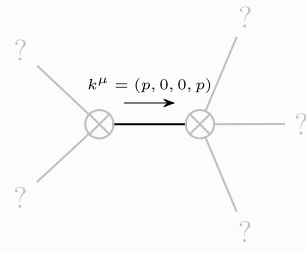| Spin-parity form	Covariant form	Multiplicities
$\overset{0^+}{\bullet}\mathcal{T}^\perp == 0$	$\partial_\beta\partial_\alpha\mathcal{T}^{\alpha\beta} == 0$	1
$\overset{1^-}{\bullet}\mathcal{T}^{\perp\alpha} == 0$	$\partial_\chi\partial_\beta\partial^\alpha\mathcal{T}^{\beta\chi} == \partial_\chi\partial^\chi\partial_\beta\mathcal{T}^{\alpha\beta}$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

Massive spectrum

(There are no massive particles)

Massless spectrum
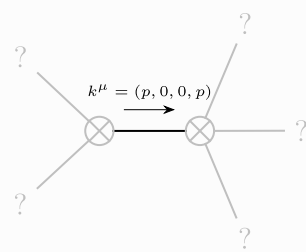
Massless particle

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

Massless particle

Pole residue:	$\dfrac{1+2\,p^2}{\alpha_2} > 0$
Polarisations:	1

Gauge symmetries

(Not yet implemented in PSALTer)

Unitarity conditions

$\alpha_1 > 0$ && $\alpha_2 > 0$

Validity assumptions

(Not yet implemented in PSALTer)