PSALTer results panel

$$S == \iiiint \left(\rho\,\varphi + h^{\alpha\beta}\ \mathcal{T}_{\alpha\beta} + \frac{1}{2}\,\alpha_2\,\partial_\alpha\varphi\,\partial^\alpha\varphi + \frac{1}{8}\,\alpha_1 \Big(36\,(1+2\,\varphi)\,\partial_\alpha\partial^\alpha\varphi - 12\,\partial_\alpha h^\beta{}_\beta\,\partial^\alpha\varphi + 18\,\partial_\alpha\varphi\,\partial^\alpha\varphi + 12\,\partial^\alpha\varphi\,\partial_\beta h_\alpha{}^\beta - \right.$$
$$4\,\partial_\beta\partial_\alpha h^{\alpha\beta} + 4\,\partial_\beta\partial^\beta h^\alpha{}_\alpha - \partial_\beta h^\chi{}_\chi\,\partial^\beta h^\alpha{}_\alpha + 2\,\partial^\beta h^\alpha{}_\alpha\,\partial_\chi h_\beta{}^\chi - 2\,\partial_\beta h_\alpha{}_\chi\,\partial^\chi h^{\alpha\beta} + \partial_\chi h_{\alpha\beta}\,\partial^\chi h^{\alpha\beta} \Big) +$$
$$\alpha_5 \Big(-6\,\partial_\beta\partial_\alpha h^\chi{}_\chi\,\partial^\beta\partial^\alpha\varphi - 18\,\partial_\beta\partial_\alpha\varphi\,\partial^\beta\partial^\alpha\varphi + 6\,\partial^\beta\partial^\alpha\varphi\,\partial_\chi\partial_\alpha h_\beta{}^\chi + 6\,\partial^\beta\partial^\alpha\varphi\,\partial_\chi\partial_\beta h_\alpha{}^\chi - 6\,\partial^\beta\partial^\alpha\varphi\,\partial_\chi\partial^\chi h_{\alpha\beta} +$$
$$6\,\partial_\alpha\partial^\alpha\varphi \Big(3\,\partial_\beta\partial^\beta\varphi - \partial_\chi\partial_\beta h^{\beta\chi} + \partial_\chi\partial^\chi h_\beta{}^\beta \Big) - \partial_\chi\partial_\beta h^\delta{}_\delta\,\partial^\chi\partial^\beta h^\alpha{}_\alpha - 2\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\beta h_\chi{}^\delta -$$
$$2\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\chi h_\beta{}^\delta + 4\,\partial^\chi\partial_\alpha h^\alpha{}_\alpha\,\partial_\delta\partial_\chi h_\beta{}^\delta + \partial_\beta\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial_\chi h^{\chi\delta} - 2\,\partial_\beta\partial^\beta h^\alpha{}_\alpha\,\partial_\delta\partial_\chi h^{\chi\delta} -$$
$$\partial_\chi\partial^\chi h^{\alpha\beta}\,\partial_\delta\partial^\delta h_{\alpha\beta} + 4\,\partial^\chi\partial_\alpha h^{\alpha\beta}\,\partial_\delta\partial^\delta h_{\beta\chi} - 2\,\partial^\chi\partial^\beta h^\alpha{}_\alpha\,\partial_\delta\partial^\delta h_{\beta\chi} + \partial_\beta\partial^\beta h^\alpha{}_\alpha\,\partial_\delta\partial^\delta h^\chi{}_\chi + \partial_\beta\partial_\alpha h_\chi{}_\delta\,\partial^\delta\partial^\chi h^{\alpha\beta} -$$
$$\left. \partial_\chi\partial_\beta h_{\alpha\delta}\,\partial^\delta\partial^\chi h^{\alpha\beta} - \partial_\delta\partial_\beta h_{\alpha\chi}\,\partial^\delta\partial^\chi h^{\alpha\beta} + \partial_\delta\partial_\chi h_{\alpha\beta}\,\partial^\delta\partial^\chi h^{\alpha\beta} \Big) \right)[t,\ x,\ y,\ z]\,dz\,dy\,dx\,dt$$

Wave operator

Saturated propagator

Source constraints

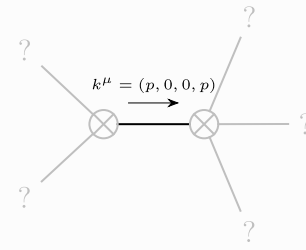| Spin-parity form	Covariant form	Multiplicities
${}^{0^+}_{\bullet}\mathcal{T}^\perp == 0$	$\partial_\beta\partial_\alpha\mathcal{T}^{\alpha\beta} == 0$	1
${}^{1^-}_{\bullet}\mathcal{T}^{\perp\alpha} == 0$	$\partial_\chi\partial_\beta\partial^\alpha\mathcal{T}^{\beta\chi} == \partial_\chi\partial^\chi\partial_\beta\mathcal{T}^{\alpha\beta}$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

Massive spectrum

(There are no massive particles)

Massless spectrum
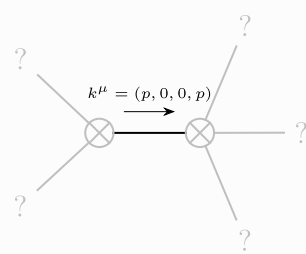
Massless particle

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

Massless particle

Pole residue:	$\frac{1+18\,p^2}{18\,\alpha_1+\alpha_2} > 0$
Polarisations:	1

Gauge symmetries

(Not yet implemented in PSALTer)

Unitarity conditions

$\alpha_1 > 0\ \&\&\ \alpha_2 > -18\,\alpha_1$

Validity assumptions

(Not yet implemented in PSALTer)