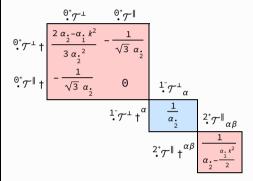# PSALTer results panel

$S ==$

$$\iiiint \left(\alpha_{\underset{2}{.}} \left(h_{\alpha\beta}\ h^{\alpha\beta} - h^{\alpha}_{\ \alpha}\ h^{\beta}_{\ \beta} \right) + h^{\alpha\beta}\ \mathcal{T}_{\alpha\beta} + \frac{1}{2}\ \alpha_{\underset{1}{.}} \left(\partial_{\beta} h^{\chi}_{\ \chi} \partial^{\beta} h^{\alpha}_{\ \alpha} + 2\ \partial_{\alpha} h^{\alpha\beta} \partial_{\chi} h_{\beta}^{\ \chi} - 2\ \partial^{\beta} h^{\alpha}_{\ \alpha} \partial_{\chi} h_{\beta}^{\ \chi} - \partial_{\chi} h_{\alpha\beta} \partial^{\chi} h^{\alpha\beta} \right) \right) [t,\ x,\ y,\ z]$$

$dz\,dy\,dx\,dt$

Wave operator
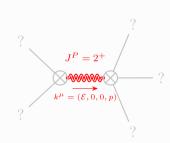

Saturated propagator

Source constraints

(There are no source constraints and no gauge symmetries)

Massive spectrum

Massive particle

Massive particle	
Pole residue:	$-\dfrac{2}{\alpha_{\underset{1}{.}}} > 0$
Square mass:	$\dfrac{2\,\alpha_{\underset{2}{.}}}{\alpha_{\underset{1}{.}}} > 0$
Spin:	2
Parity:	Even

Massless spectrum

(There are no massless particles)

Gauge symmetries

(Not yet implemented in PSALTer)

Unitarity conditions

$\alpha_{\underset{1}{.}} < 0\ \&\&\ \alpha_{\underset{2}{.}} < 0$

Validity assumptions

(Not yet implemented in PSALTer)