PSALTer results panel

$$\mathcal{S} == $$
$$\iiiint (\alpha_2\, h_{\alpha\beta}\ h^{\alpha\beta} - \alpha_3\ h^\alpha{}_\alpha\ h^\beta{}_\beta + h^{\alpha\beta}\ \mathcal{T}_{\alpha\beta} + \tfrac{1}{2}\,\alpha_1\,(\partial_\beta h^\chi{}_\chi\,\partial^\beta h^\alpha{}_\alpha + 2$$
$$\partial_\alpha h^{\alpha\beta}\,\partial_\chi h_\beta{}^\chi - 2\,\partial^\beta h^\alpha{}_\alpha\,\partial_\chi h_\beta{}^\chi -$$
$$\partial_\chi h_{\alpha\beta}\,\partial^\chi h^{\alpha\beta}))[t,\,x,\,y,\,z]\,dz\,dy\,dx\,dt$$

Wave operator

	$0^+ h^\perp$	$0^+ h^\parallel$
$0^+ h^\perp \dagger$	$\alpha_2 - \alpha_3$	$-\sqrt{3}\,\alpha_3$
$0^+ h^\parallel \dagger$	$-\sqrt{3}\,\alpha_3$	$\alpha_2 - 3\,\alpha_3 + \alpha_1\,k^2$

	$1^- h^\perp{}_\alpha$
$1^- h^\perp \dagger^\alpha$	α_2

	$2^+ h^\parallel{}_{\alpha\beta}$
$2^+ h^\parallel \dagger^{\alpha\beta}$	$\alpha_2 - \dfrac{\alpha_1\,k^2}{2}$

Saturated propagator

	$0^+ \mathcal{T}^\perp$	$0^+ \mathcal{T}^\parallel$
$0^+ \mathcal{T}^\perp \dagger$	$\dfrac{1}{\alpha_2 + \alpha_3\left(-1 - \frac{3\alpha_3}{\alpha_2 - 3\alpha_3 + \alpha_1 k^2}\right)}$	$\dfrac{\sqrt{3}\,\alpha_3}{\alpha_2\,(\alpha_2 - 4\alpha_3) + \alpha_1\,(\alpha_2 - \alpha_3)\,k^2}$
$0^+ \mathcal{T}^\parallel \dagger$	$\dfrac{\sqrt{3}\,\alpha_3}{\alpha_2\,(\alpha_2 - 4\alpha_3) + \alpha_1\,(\alpha_2 - \alpha_3)\,k^2}$	$\dfrac{1}{\frac{\alpha_2\,(\alpha_2 - 4\alpha_3)}{\alpha_2 - \alpha_3} + \alpha_1\,k^2}$

	$1^- \mathcal{T}^\perp{}_\alpha$
$1^- \mathcal{T}^\perp \dagger^\alpha$	$\dfrac{1}{\alpha_2}$

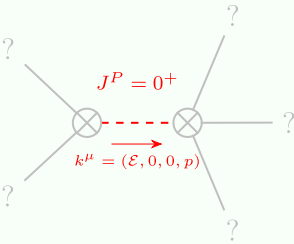|	$2^+ \mathcal{T}^\parallel{}_{\alpha\beta}$
$2^+ \mathcal{T}^\parallel \dagger^{\alpha\beta}$	$\dfrac{1}{\alpha_2 - \frac{\alpha_1\,k^2}{2}}$

Source constraints

(No source constraints)

Massive spectrum

$J^P = 0^+$

$k^\mu = (\mathcal{E}, 0, 0, p)$

$J^P = 2^+$

$k^\mu = (\mathcal{E}, 0, 0, p)$
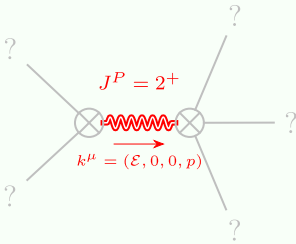
Massive particle

Massive particle

Pole residue:	$\dfrac{\alpha_2{}^2 - 2\,\alpha_2\,\alpha_3 + 4\,\alpha_3{}^2}{\alpha_1\,(\alpha_2 - \alpha_3)^2} > 0$
Square mass:	$-\dfrac{\alpha_2\,(\alpha_2 - 4\alpha_3)}{\alpha_1\,(\alpha_2 - \alpha_3)} > 0$
Spin:	0
Parity:	Even

Pole residue:	$-\dfrac{2}{\alpha_1} > 0$
Square mass:	$\dfrac{2\,\alpha_2}{\alpha_1} > 0$
Spin:	2
Parity:	Even

Massless spectrum

(No particles)

Unitarity conditions

(Demonstrably impossible)