PSALTer results panel

$$\mathcal{S} == \iiiint \Big(\alpha_{2}\, h_{\alpha\beta}\, h^{\alpha\beta} - \alpha_{3}\, h^{\alpha}{}_{\alpha}\, h^{\beta}{}_{\beta} + h^{\alpha\beta}\, \mathcal{T}_{\alpha\beta} + \frac{1}{2}\alpha_{1}\, (\partial_{\beta}h^{\chi}{}_{\chi}\,\partial^{\beta}h^{\alpha}{}_{\alpha} + 2\,\partial_{\alpha}h^{\alpha\beta}\,\partial_{\chi}h_{\beta}{}^{\chi} - 2\,\partial^{\beta}h^{\alpha}{}_{\alpha}\,\partial_{\chi}h_{\beta}{}^{\chi} - \partial_{\chi}h_{\alpha\beta}\,\partial^{\chi}h^{\alpha\beta})\Big)[t, x, y, z]\, dz\, dy\, dx\, dt$$

Wave operator

$$\begin{array}{c|cc|c|c}
 & 0^{+}h^{\perp} & 0^{+}h^{\parallel} & 1^{-}h^{\perp}{}_{\alpha} & 2^{+}h^{\parallel}{}_{\alpha\beta} \\ \hline
0^{+}h^{\perp}\dagger & \alpha_{2}-\alpha_{3} & -\sqrt{3}\,\alpha_{3} & & \\
0^{+}h^{\parallel}\dagger & -\sqrt{3}\,\alpha_{3} & \alpha_{2}-3\alpha_{3}+\alpha_{1}k^{2} & & \\ \hline
1^{-}h^{\perp}\dagger^{\alpha} & & & \alpha_{2} & \\ \hline
2^{+}h^{\parallel}\dagger^{\alpha\beta} & & & & \alpha_{2}-\frac{\alpha_{1}k^{2}}{2}
\end{array}$$

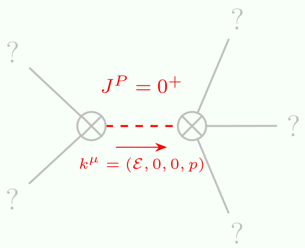
Saturated propagator

$$\begin{array}{c|cc|c|c}
 & 0^{+}\mathcal{T}^{\perp} & 0^{+}\mathcal{T}^{\parallel} & 1^{-}\mathcal{T}^{\perp}{}_{\alpha} & 2^{+}\mathcal{T}^{\parallel}{}_{\alpha\beta} \\ \hline
0^{+}\mathcal{T}^{\perp}\dagger & \frac{1}{\alpha_{2}+\alpha_{3}\left(-1-\frac{3\alpha_{3}}{\alpha_{2}-3\alpha_{3}+\alpha_{1}k^{2}}\right)} & \frac{\sqrt{3}\,\alpha_{3}}{\alpha_{2}(\alpha_{2}-4\alpha_{3})+\alpha_{1}(\alpha_{2}-\alpha_{3})k^{2}} & & \\
0^{+}\mathcal{T}^{\parallel}\dagger & \frac{\sqrt{3}\,\alpha_{3}}{\alpha_{2}(\alpha_{2}-4\alpha_{3})+\alpha_{1}(\alpha_{2}-\alpha_{3})k^{2}} & \frac{1}{\frac{\alpha_{2}(\alpha_{2}-4\alpha_{3})}{\alpha_{2}-\alpha_{3}}+\alpha_{1}k^{2}} & & \\ \hline
1^{-}\mathcal{T}^{\perp}\dagger^{\alpha} & & & \frac{1}{\alpha_{2}} & \\ \hline
2^{+}\mathcal{T}^{\parallel}\dagger^{\alpha\beta} & & & & \frac{1}{\alpha_{2}-\frac{\alpha_{1}k^{2}}{2}}
\end{array}$$

Source constraints

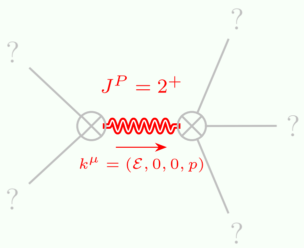
(No source constraints)

Massive spectrum



Massive particle

Pole residue:	$\frac{\alpha_{2}^{2}-2\alpha_{2}\alpha_{3}+4\alpha_{3}^{2}}{\alpha_{1}(\alpha_{2}-\alpha_{3})^{2}} > 0$
Square mass:	$-\frac{\alpha_{2}(\alpha_{2}-4\alpha_{3})}{\alpha_{1}(\alpha_{2}-\alpha_{3})} > 0$
Spin:	0
Parity:	Even



Massive particle

Pole residue:	$-\frac{2}{\alpha_{1}} > 0$
Square mass:	$\frac{2\alpha_{2}}{\alpha_{1}} > 0$
Spin:	2
Parity:	Even

Massless spectrum

(No particles)

Unitarity conditions

(Demonstrably impossible)