PSALTer results panel

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

Wave operator

	$\overset{0^+}{\cdot} h^{\perp}$	$\overset{0^+}{\cdot} h^{\parallel}$	$\overset{1^-}{\cdot} h^{\perp}{}_{\alpha}$	$\overset{2^+}{\cdot} h^{\parallel}{}_{\alpha\beta}$
$\overset{0^+}{\cdot} h^{\perp} \dagger$	$\left(\alpha_{\cdot 1} - \alpha_{\cdot 2}\right) k^2$	$\frac{1}{2} \sqrt{3} \left(\alpha_{\cdot 1} - \alpha_{\cdot 2}\right) k^2$		
$\overset{0^+}{\cdot} h^{\parallel} \dagger$	$\frac{1}{2} \sqrt{3} \left(\alpha_{\cdot 1} - \alpha_{\cdot 2}\right) k^2$	$\alpha_{\cdot 1} k^2$		
$\overset{1^-}{\cdot} h^{\perp} \dagger^{\alpha}$			0	
$\overset{2^+}{\cdot} h^{\parallel} \dagger^{\alpha\beta}$				$-\frac{\alpha_{\cdot 1} k^2}{2}$

Saturated propagator

	$\overset{0^+}{\cdot} \mathcal{T}^{\perp}$	$\overset{0^+}{\cdot} \mathcal{T}^{\parallel}$	$\overset{1^-}{\cdot} \mathcal{T}^{\perp}{}_{\alpha}$	$\overset{2^+}{\cdot} \mathcal{T}^{\parallel}{}_{\alpha\beta}$
$\overset{0^+}{\cdot} \mathcal{T}^{\perp} \dagger$	$\frac{4 \alpha_{\cdot 1}}{\left(\alpha_{\cdot 1} - \alpha_{\cdot 2}\right)\left(\alpha_{\cdot 1} + 3 \alpha_{\cdot 2}\right) k^2}$	$-\frac{2 \sqrt{3}}{\left(\alpha_{\cdot 1} + 3 \alpha_{\cdot 2}\right) k^2}$		
$\overset{0^+}{\cdot} \mathcal{T}^{\parallel} \dagger$	$-\frac{2 \sqrt{3}}{\left(\alpha_{\cdot 1} + 3 \alpha_{\cdot 2}\right) k^2}$	$\frac{4}{\left(\alpha_{\cdot 1} + 3 \alpha_{\cdot 2}\right) k^2}$		
$\overset{1^-}{\cdot} \mathcal{T}^{\perp} \dagger^{\alpha}$			0	
$\overset{2^+}{\cdot} \mathcal{T}^{\parallel} \dagger^{\alpha\beta}$				$-\frac{2}{\alpha_{\cdot 1} k^2}$

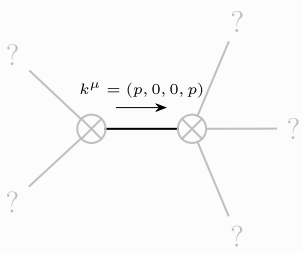
Source constraints

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

Massive spectrum

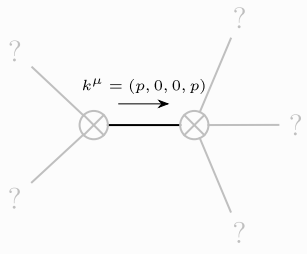
(There are no massive particles)

Massless spectrum



Massless particle

Pole residue:	$-\frac{p^2}{\alpha_{\cdot 1}} > 0$
Polarisations:	2



Massless particle

Pole residue:	$\frac{\left(\alpha_{\cdot 1}^2 - 2 \alpha_{\cdot 1} \alpha_{\cdot 2} + 5 \alpha_{\cdot 2}^2\right) p^2}{\alpha_{\cdot 1} \left(\alpha_{\cdot 1} - \alpha_{\cdot 2}\right)\left(\alpha_{\cdot 1} + 3 \alpha_{\cdot 2}\right)} > 0$
Polarisations:	1

Gauge symmetries

(Not yet implemented in PSALTer)

Unitarity conditions

$$\alpha_{\cdot 1} < 0 \;\&\&\; \left(\alpha_{\cdot 2} < \alpha_{\cdot 1} \parallel \alpha_{\cdot 2} > -\frac{\alpha_{\cdot 1}}{3}\right)$$

Validity assumptions

(Not yet implemented in PSALTer)