

PSALTer results panel

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

Wave operator

$\Theta^+_{\dot{1}} h^{\perp}$

$\Theta^+_{\dot{1}} h^{\parallel}$

$\Theta^+_{\dot{1}} h^{\perp} \uparrow$

$\Theta^+_{\dot{1}} h^{\parallel} \uparrow$

$\frac{1}{2} \left(-\alpha_{\dot{1}} + \alpha_{\dot{2}} \right) k^2$

$\frac{1}{2} \sqrt{3} \left(-\alpha_{\dot{1}} + \alpha_{\dot{2}} \right) k^2$

$\frac{1}{2} \sqrt{3} \left(-\alpha_{\dot{1}} + \alpha_{\dot{2}} \right) k^2$

$-\frac{1}{2} \left(\alpha_{\dot{1}} - 3 \alpha_{\dot{2}} \right) k^2$

$\overset{1^-}{\dot{1}} h^{\perp}_{\alpha}$

$\overset{2^+}{\dot{1}} h^{\parallel}_{\alpha\beta}$

$\overset{1^-}{\dot{1}} h^{\perp} \uparrow^{\alpha}$

$\overset{2^+}{\dot{1}} h^{\parallel} \uparrow^{\alpha\beta}$

0

$-\frac{\alpha_{\dot{1}} k^2}{2}$

Saturated propagator

$\Theta^+_{\dot{1}} \mathcal{T}^{\perp}$

$\Theta^+_{\dot{1}} \mathcal{T}^{\parallel}$

$\Theta^+_{\dot{1}} \mathcal{T}^{\perp} \uparrow$

$\Theta^+_{\dot{1}} \mathcal{T}^{\parallel} \uparrow$

$\frac{\alpha_{\dot{1}} - 3 \alpha_{\dot{2}}}{\alpha_{\dot{1}} \left(\alpha_{\dot{1}} - \alpha_{\dot{2}} \right) k^2}$

$-\frac{\sqrt{3}}{\alpha_{\dot{1}} k^2}$

$-\frac{\sqrt{3}}{\alpha_{\dot{1}} k^2}$

$\frac{1}{\alpha_{\dot{1}} k^2}$

$\overset{1^-}{\dot{1}} \mathcal{T}^{\perp}_{\alpha}$

$\overset{2^+}{\dot{1}} \mathcal{T}^{\parallel}_{\alpha\beta}$

$\overset{1^-}{\dot{1}} \mathcal{T}^{\perp} \uparrow^{\alpha}$

$\overset{2^+}{\dot{1}} \mathcal{T}^{\parallel} \uparrow^{\alpha\beta}$

0

$-\frac{2}{\alpha_{\dot{1}} k^2}$

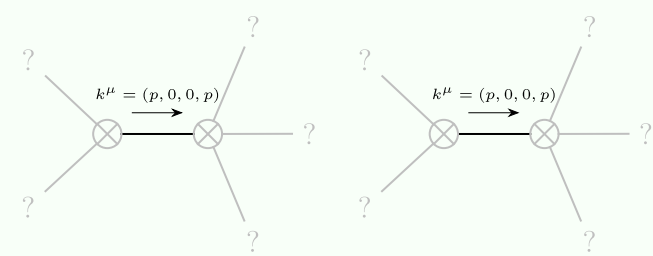
Source constraints

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

Massive spectrum

(No particles)

Massless spectrum



Massless particle

Massless particle

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

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

Unitarity conditions

$$\alpha_{\dot{1}} < 0 \ \&\& \ \alpha_{\dot{2}} > \alpha_{\dot{1}}$$