

PSALTer results panel

$$S = \int \int \int \int \left( \alpha_2 \cdot h_{\alpha\beta} h^{\alpha\beta} - \alpha_3 \cdot h^\alpha_\alpha h^\beta_\beta + h^{\alpha\beta} \mathcal{T}_{\alpha\beta} + \frac{1}{2} \alpha_1 \cdot \left( \partial_\beta h^\chi_\chi \partial^\beta h^\alpha_\alpha + 2 \partial_\alpha h^{\alpha\beta} \partial_\chi h_\beta^\chi - 2 \partial^\beta h^\alpha_\alpha \partial_\chi h_\beta^\chi - \partial_\chi h_{\alpha\beta} \partial^\chi h^{\alpha\beta} \right) \right) [t, x, y, z] dz dy dx dt$$

Wave operator

$\Theta^+_{\cdot} h^\perp$

$\alpha_2 \cdot - \alpha_3 \cdot$

$\Theta^+_{\cdot} h^\parallel$

$- \sqrt{3} \alpha_3 \cdot$

$\Theta^+_{\cdot} h^\perp \dagger$

$- \sqrt{3} \alpha_3 \cdot$

$\Theta^+_{\cdot} h^\parallel \dagger$

$\alpha_2 \cdot - 3 \alpha_3 \cdot + \alpha_1 \cdot k^2$

$1^-_{\cdot} h^\perp_\alpha$

$\alpha_2 \cdot$

$2^+_{\cdot} h^\parallel_{\alpha\beta}$

$\alpha_2 \cdot - \frac{\alpha_1 \cdot k^2}{2}$

Saturated propagator

$\Theta^+_{\cdot} \mathcal{T}^\perp$

$\frac{1}{\alpha_2 \cdot + \alpha_3 \cdot \left( -1 - \frac{3 \alpha_3 \cdot}{\alpha_2 \cdot - 3 \alpha_3 \cdot + \alpha_1 \cdot k^2} \right)}$

$\Theta^+_{\cdot} \mathcal{T}^\parallel$

$\frac{\sqrt{3} \alpha_3 \cdot}{\alpha_2 \cdot \left( \alpha_2 \cdot - 4 \alpha_3 \cdot \right) + \alpha_1 \cdot \left( \alpha_2 \cdot - \alpha_3 \cdot \right) k^2}$

$\Theta^+_{\cdot} \mathcal{T}^\perp \dagger$

$\frac{\sqrt{3} \alpha_3 \cdot}{\alpha_2 \cdot \left( \alpha_2 \cdot - 4 \alpha_3 \cdot \right) + \alpha_1 \cdot \left( \alpha_2 \cdot - \alpha_3 \cdot \right) k^2}$

$\Theta^+_{\cdot} \mathcal{T}^\parallel \dagger$

$\frac{1}{\frac{\alpha_2 \cdot \left( \alpha_2 \cdot - 4 \alpha_3 \cdot \right)}{\alpha_2 \cdot - \alpha_3 \cdot} + \alpha_1 \cdot k^2}$

$1^-_{\cdot} \mathcal{T}^\perp_\alpha$

$\frac{1}{\alpha_2 \cdot}$

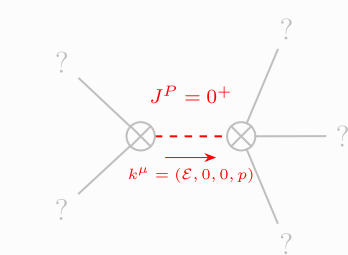
$2^+_{\cdot} \mathcal{T}^\parallel_{\alpha\beta}$

$\frac{1}{\alpha_2 \cdot - \frac{\alpha_1 \cdot k^2}{2}}$

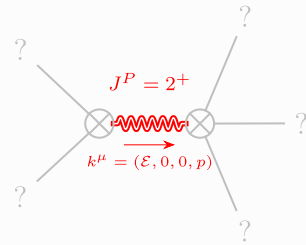
Source constraints

(There are no source constraints and no gauge symmetries)

Massive spectrum



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



Massive particle	
Pole residue:	$-\frac{2}{\alpha_1 \cdot} > 0$
Square mass:	$\frac{2 \alpha_2 \cdot}{\alpha_1 \cdot} > 0$
Spin:	2
Parity:	Even

Massless spectrum

(There are no massless particles)

Gauge symmetries

(Not yet implemented in PSALTer)

Unitarity conditions

(Unitarity is demonstrably impossible)

Validity assumptions

(Not yet implemented in PSALTer)