

# PSALTer results panel

$$S = \int \int \int \int (\alpha_3 \mathcal{B}_\alpha \mathcal{B}^\alpha + \mathcal{B}^\alpha \mathcal{J}_\alpha + 2 \alpha_1 (-\partial_\alpha \mathcal{B}_\beta + \partial_\beta \mathcal{B}_\alpha) \partial^\beta \mathcal{B}^\alpha) [t, x, y, z] dz dy dx dt$$

## Wave operator

$$\begin{array}{cc} & {}^{0+}\mathcal{B} \\ {}^{0+}\mathcal{B} \dagger & \boxed{\alpha_3} \quad {}^{1-}\mathcal{B}_\alpha \\ & {}^{1-}\mathcal{B} \dagger^\alpha \quad \boxed{\alpha_3 + 2 \alpha_1 k^2} \end{array}$$

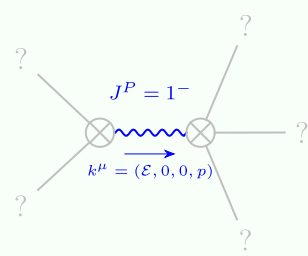
## Saturated propagator

$$\begin{array}{cc} & {}^{0+}\mathcal{J} \\ {}^{0+}\mathcal{J} \dagger & \boxed{\frac{1}{\alpha_3}} \quad {}^{1-}\mathcal{J}_\alpha \\ & {}^{1-}\mathcal{J} \dagger^\alpha \quad \boxed{\frac{1}{\alpha_3 + 2 \alpha_1 k^2}} \end{array}$$

## Source constraints

(No source constraints)

## Massive spectrum



Massive particle

Pole residue:	$-\frac{1}{2 \alpha_1} > 0$
Square mass:	$-\frac{\alpha_3}{2 \alpha_1} > 0$
Spin:	1
Parity:	Odd

## Massless spectrum

(No particles)

## Unitarity conditions

$$\alpha_1 < 0 \ \&\& \ \alpha_3 > 0$$