### $S == \iiint \left( \mathcal{B}^{\alpha} \ \mathcal{J}_{\alpha} + 2 \ \alpha_{\frac{1}{1}} \left( -\partial_{\alpha}\mathcal{B}_{\beta} + \partial_{\beta}\mathcal{B}_{\alpha} \right) \partial^{\beta}\mathcal{B}^{\alpha} \right) [t \ , \ x \ , \ y \ , \ z] \ dz \ dy \ dx \ dt$ <u>Wave</u> <u>operator</u> $\begin{array}{c|c} 0^{+}\mathcal{B} \\ 0 & \stackrel{1^{-}}{\cdot}\mathcal{B}_{\alpha} \end{array}$ $\begin{array}{c|c} 1^{-}\mathcal{B}_{\alpha} \\ 1^{-}\mathcal{B}_{1} & 2\alpha_{1} & k^{2} \end{array}$ Saturated propagator $\begin{array}{c|c} 0 & \mathcal{J} \\ 0 & 1 & \mathcal{J}_{\alpha} \\ \hline 1 & \mathcal{J}_{\alpha} \\ \hline 1 & \mathcal{J}_{\alpha} \\ \end{array}$ <u>Source</u> <u>constraints</u> Spin-parity form | Covariant form | Multiplicities $0^{+} \mathcal{J} == 0 \qquad \qquad \partial_{\alpha} \mathcal{J}^{\alpha} == 0$ Total expected gauge generators: 1 Massive spectrum

PSALTer results panel

## (There are no massive particles) Massless spectrum

# Massless particle Pole residue:

# Polarisations: 2

### <u>Gauge symmetries</u>

### (Not yet implemented in PSALTer)

### **Unitarity** conditions

(Not yet implemented in PSALTer)

 $\alpha_{\cdot} < 0$ 

<u>Validity</u> <u>assumptions</u>