

# Particle spectrograph

## Wave operator and propagator

Source constraints/gauge generators

SO(3) irreps	Multiplicities
$\mathcal{J}_{1^-}^{\#1\alpha} == 0$	3
Total constraints:	3

$\mathcal{B}^\alpha \mathcal{J}_\alpha + \beta \partial_\alpha \mathcal{B}^\alpha \partial_\beta \mathcal{B}^\beta$

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Quadratic (free) Lagrangian density

$$\mathcal{J}_{1^-}^{\#1\alpha} + \alpha \mathcal{J}_{1^-}^{\#1\alpha}$$

0

$$\mathcal{B}_{1^-}^{\#1\alpha} + \alpha \mathcal{B}_{1^-}^{\#1\alpha}$$

0

$$\mathcal{J}_{0^+}^{\#1} + \frac{1}{\beta k^2}$$

$$\mathcal{B}_{0^+}^{\#1} + \beta k^2$$

## Massive and massless spectra

(No massless particles)

(No massive particles)

## Unitarity conditions

True