

## Lagrangian density

$$\alpha \partial_\beta h^\chi_\chi \partial^\beta h^\alpha_\alpha - 2 \alpha \partial_\beta h_{\alpha\chi} \partial^\chi h^{\alpha\beta} + \alpha \partial_\chi h_{\alpha\beta} \partial^\chi h^{\alpha\beta}$$

Added source term:  $h^{\alpha\beta} \mathcal{T}_{\alpha\beta}$

$$h_{1-}^{\#1} + \alpha \boxed{0} \quad h_{1-}^{\#1}$$

$$\begin{array}{cc} \mathcal{T}_{0+}^{\#1} + & \mathcal{T}_{0+}^{\#1} \\ \mathcal{T}_{0+}^{\#2} + & \mathcal{T}_{0+}^{\#2} \end{array} \begin{array}{cc} \boxed{0} & \boxed{\frac{1}{\sqrt{3} \alpha k^2}} \\ \boxed{\frac{1}{\sqrt{3} \alpha k^2}} & \boxed{-\frac{4}{3 \alpha k^2}} \end{array}$$

$$\begin{array}{cc} h_{0+}^{\#1} + & h_{0+}^{\#2} \\ h_{0+}^{\#2} + & h_{0+}^{\#2} \end{array} \begin{array}{cc} \boxed{4 \alpha k^2} & \boxed{\sqrt{3} \alpha k^2} \\ \boxed{\sqrt{3} \alpha k^2} & \boxed{0} \end{array}$$

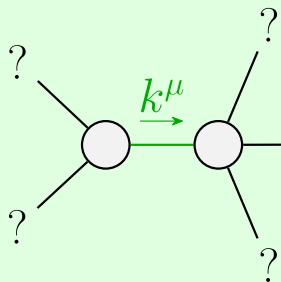
## Source constraints

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

$$\mathcal{T}_{2+}^{\#1} + \alpha \beta \boxed{\frac{1}{\alpha k^2}}$$

$$h_{2+}^{\#1} + \alpha \beta \boxed{\alpha k^2}$$

$$\mathcal{T}_{1-}^{\#1} + \alpha \boxed{0}$$



Quadratic pole

Pole residue:  $\frac{1}{\alpha} > 0$

Polarisations: 3

Unitarity conditions  
 $\alpha > 0$

(No massive particles)