

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

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

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

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

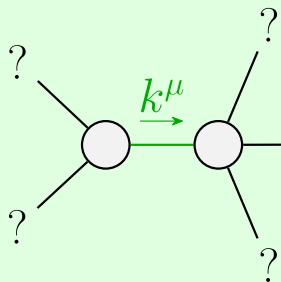
$$h_{1^- \alpha}^{\#1} \quad \boxed{0}$$

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

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

Source constraints

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



Quadratic pole

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

Polarisations: 3

Unitarity conditions
 $\alpha > 0$

(No massive particles)