

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: $h^{\alpha\beta} \tau_{\alpha\beta}$

$$\begin{array}{cc} \tau_{0+}^{\#1} & \tau_{0+}^{\#2} \\ \tau_{0+}^{\#1} + & \begin{array}{|c|c|} \hline 0 & \frac{1}{\sqrt{3} \alpha k^2} \\ \hline \frac{1}{\sqrt{3} \alpha k^2} & -\frac{4}{3 \alpha k^2} \\ \hline \end{array} \\ \tau_{0+}^{\#2} + & \end{array}$$

Source constraints

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

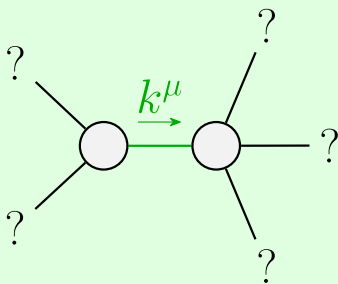
$$\begin{array}{cc} h_{0+}^{\#1} + & h_{0+}^{\#2} \\ \begin{array}{|c|c|} \hline \sqrt{3} \alpha k^2 & 4 \alpha k^2 \\ \hline \end{array} & \begin{array}{|c|c|} \hline \sqrt{3} \alpha k^2 & 0 \\ \hline \end{array} \end{array}$$

$$\tau_{2+}^{\#1\alpha\beta} \begin{array}{|c|} \hline \frac{1}{\alpha k^2} \\ \hline \end{array}$$

$$h_{2+}^{\#1} + \alpha\beta \begin{array}{|c|} \hline \alpha k^2 \\ \hline \end{array} h_{2+}^{\#1\alpha\beta}$$

$$\tau_{1-}^{\#1\alpha} \begin{array}{|c|} \hline 0 \\ \hline \end{array}$$

$$h_{1-}^{\#1} + \alpha \begin{array}{|c|} \hline 0 \\ \hline \end{array} h_{1-}^{\#1\alpha}$$



Quadratic pole

Pole residue:	$\frac{1}{\alpha} > 0$
Polarisations:	3

Unitarity conditions

$$\alpha > 0$$

(No massive particles)