

Lagrangian density

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

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

Source constraints

SO(3) irreps	#
$\mathcal{T}_{0+}^{\#2} == 0$	1
$\mathcal{T}_{1-}^{\#1\alpha} == 0$	3
$\mathcal{T}_{2+}^{\#1\alpha\beta} == 0$	5
Total #:	9

Unitarity conditions
True

(No massless particles)

(No massive particles)

$$\mathcal{T}_{1-}^{\#1} + \alpha \begin{bmatrix} 0 \end{bmatrix} \quad \mathcal{T}_{1-}^{\#1}{}_\alpha$$

$$h_{1-}^{\#1} + \alpha \begin{bmatrix} 0 \end{bmatrix} \quad h_{1-}^{\#1}{}_\alpha$$

$$h_{2+}^{\#1} + \alpha^\beta \begin{bmatrix} 0 \end{bmatrix} \quad h_{2+}^{\#1}{}_{\alpha\beta}$$

$$\mathcal{T}_{2+}^{\#1} + \alpha^\beta \begin{bmatrix} 0 \end{bmatrix} \quad \mathcal{T}_{2+}^{\#1}{}_{\alpha\beta}$$

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

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