

Lagrangian density

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

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)

$$\mathcal{T}_1^{\#1} + \mathcal{T}_1^{\#1\alpha} \begin{bmatrix} 0 \end{bmatrix}$$

$$h_1^{\#1} + h_1^{\#1\alpha} \begin{bmatrix} 0 \end{bmatrix}$$

$$h_2^{\#1} + h_2^{\#1\alpha\beta} \begin{bmatrix} 0 \end{bmatrix}$$

$$\mathcal{T}_2^{\#1} + \mathcal{T}_2^{\#1\alpha\beta} \begin{bmatrix} 0 \end{bmatrix}$$

$$\begin{matrix} h_0^{\#1} + & h_0^{\#2} + \\ h_0^{\#1} + & h_0^{\#2} + \end{matrix} \begin{bmatrix} -3\alpha k^4 & 0 \\ 0 & 0 \end{bmatrix}$$

$$\begin{matrix} \mathcal{T}_0^{\#1} + & \mathcal{T}_0^{\#2} + \\ \mathcal{T}_0^{\#1} + & \mathcal{T}_0^{\#2} + \end{matrix} \begin{bmatrix} -\frac{1}{3\alpha k^4} & 0 \\ 0 & 0 \end{bmatrix}$$