

Lagrangian density

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

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

$$\mathcal{T}_{1^-}^{\#1} \dagger^\alpha \mathcal{T}_{1^-}^{\#1}{}_\alpha$$

$$h_{1^-}^{\#1} \dagger^\alpha h_{1^-}^{\#1}{}_\alpha$$

$$h_{2^+}^{\#1} \dagger^{\alpha\beta} h_{2^+}^{\#1}{}_{\alpha\beta}$$

$$\mathcal{T}_{2^+}^{\#1} \dagger^{\alpha\beta} \mathcal{T}_{2^+}^{\#1}{}_{\alpha\beta}$$

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

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

Unitarity conditions

True

(No massless particles)

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