

Lagrangian density

$$h^{\alpha\beta} \mathcal{T}_{\alpha\beta} - \alpha \partial_\beta \partial_\alpha h^{\alpha\beta} \partial_\delta \partial_\chi h^{\chi\delta} + 2 \alpha \partial_\beta \partial^\beta h^\alpha{}_\alpha \partial_\delta \partial_\chi h^{\chi\delta} - \alpha \partial_\beta \partial^\beta h^\alpha{}_\alpha \partial_\delta \partial^\delta h^\chi{}_\chi$$

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

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

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

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

$$\mathcal{T}_{2+}^{\#1\alpha\beta} \begin{array}{|c|} \hline 0 \\ \hline \end{array}$$

$$h_{2+}^{\#1\alpha\beta} \begin{array}{|c|} \hline 0 \\ \hline \end{array}$$

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

(No massless particles)

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True