

# Lagrangian density

$$\beta h_{\alpha\beta} h^{\alpha\beta} - \beta h^\alpha{}_\alpha h^\beta{}_\beta + h^{\alpha\beta} \mathcal{T}_{\alpha\beta} + \frac{1}{2} \alpha \partial_\beta h^\chi{}_\chi \partial^\beta h^\alpha{}_\alpha +$$

$$\alpha \partial_\alpha h^{\alpha\beta} \partial_\chi h_\beta{}^\chi - \alpha \partial^\beta h^\alpha{}_\alpha \partial_\chi h_\beta{}^\chi - \frac{1}{2} \alpha \partial_\chi h_{\alpha\beta} \partial^\chi h^{\alpha\beta}$$

$h_{0+}^{\#1} + h_{0+}^{\#2}$	$h_{0+}^{\#1}$	$h_{0+}^{\#2}$
$-2\beta + \alpha k^2$	$0$	$-\sqrt{3}\beta$
$-\sqrt{3}\beta$	$0$	$0$

$\mathcal{T}_{0+}^{\#1} + \mathcal{T}_{0+}^{\#2}$	$\mathcal{T}_{0+}^{\#1}$	$\mathcal{T}_{0+}^{\#2}$
$-\frac{1}{\sqrt{3}\beta}$	$0$	$-\frac{1}{\sqrt{3}\beta}$
$\frac{2\beta\alpha k^2}{3\beta^2}$	$\frac{2\beta\alpha k^2}{3\beta^2}$	$\frac{2\beta\alpha k^2}{3\beta^2}$

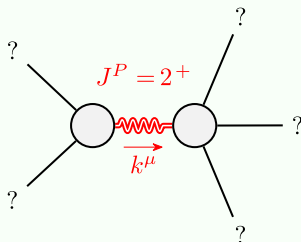
$\mathcal{T}_{2+}^{\#1} + \alpha\beta$	$\mathcal{T}_{2+}^{\#1}$
$\frac{1}{\beta} \frac{\alpha k^2}{2}$	$\frac{1}{\beta} \frac{\alpha k^2}{2}$

$h_{2+}^{\#1} + \alpha\beta$	$h_{2+}^{\#1}$
$\beta - \frac{\alpha k^2}{2}$	$\beta - \frac{\alpha k^2}{2}$

$\mathcal{T}_{1-}^{\#1} + \alpha$	$\mathcal{T}_{1-}^{\#1}$
$\frac{1}{\beta}$	$\frac{1}{\beta}$

$h_{1-}^{\#1} + \alpha$	$h_{1-}^{\#1}$
$\beta$	$\beta$

(No source constraints)



Massive particle

Pole residue:	$-\frac{2}{\alpha} > 0$
Polarisations:	5
Square mass:	$\frac{2\beta}{\alpha} > 0$
Spin:	2
Parity:	Even

(No massless particles)

$$\alpha < 0 \text{ \&\& } \beta < 0$$