

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

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

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

Lagrangian density

$$\begin{aligned} & \beta h_{\alpha\beta} h^{\alpha\beta} - \gamma h^\alpha h^\beta + \\ & \frac{1}{2} \alpha \partial_\beta h^\chi \partial^\beta h^\alpha + \alpha \partial_\alpha h^{\alpha\beta} \partial_\chi h^\chi_\beta - \\ & \alpha \partial^\beta h^\alpha_\alpha \partial_\chi h^\chi_\beta - \frac{1}{2} \alpha \partial_\chi h_{\alpha\beta} \partial^\chi h^{\alpha\beta} \end{aligned}$$

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

(No source constraints)

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

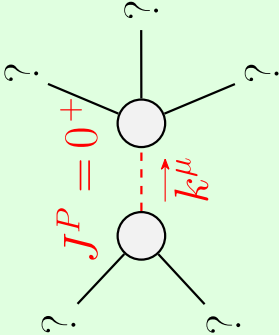
$$h_{1^+}^{\#1} \dagger^\alpha \boxed{\beta} h_{1^+}^{\#1} \alpha$$

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

(No massless particles)

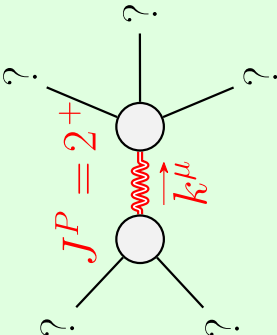
Massive particle

Pole residue:	$\frac{\beta^2 - 2\beta\gamma + 4\gamma^2}{\alpha(\beta-\gamma)^2} > 0$
Polarisations:	1
Square mass:	$-\frac{\beta(\beta-4\gamma)}{\alpha(\beta-\gamma)} > 0$
Spin:	0
Parity:	Even



Massive particle

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



Unitarity conditions

(Unitarity is demonstrably impossible)