

Lagrangian density

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

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

$\rho_{0+}^{\#1} \vdash$	$\mathcal{T}_{0+}^{\#2} \vdash$	$\mathcal{T}_{0+}^{\#1} \vdash$
0	0	$\frac{1}{\alpha k^2}$
0	0	0
$\frac{1}{\beta k^2}$	0	0

Source constraints	SO(3) irreps	#
$\mathcal{T}_{0+}^{\#2} == 0$		1
$\mathcal{T}_{1-}^{\#1 \alpha} == 0$		3
Total #:		4

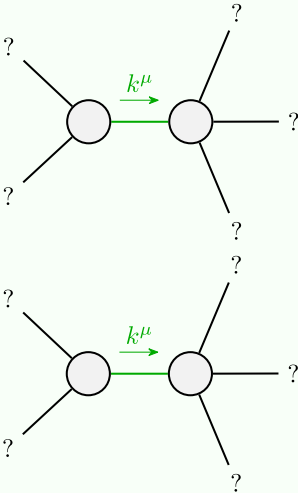
	$h_{0+}^{\#1}$	$h_{0+}^{\#2}$	$\phi_{0+}^{\#1}$
$h_{0+}^{\#1} \vdash$	αk^2	0	0
$h_{0+}^{\#2} \vdash$	0	0	0
$\phi_{0+}^{\#1} \vdash$	0	0	βk^2

	$h_{1-}^{\#1} \alpha$
$h_{1-}^{\#1} \vdash^{\alpha}$	0

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

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

	$\mathcal{T}_{1-}^{\#1} \alpha$
$\mathcal{T}_{1-}^{\#1} \vdash^{\alpha}$	0



Quadratic pole

Pole residue:	$-\frac{1}{\alpha} > 0$
---------------	-------------------------

Polarisations:	2
----------------	---

Quadratic pole

Pole residue:	$\frac{1}{\beta} > 0$
---------------	-----------------------

Polarisations:	1
----------------	---

(No massive particles)

$$\alpha < 0 \ \&\& \ \beta > 0$$