Lagrangian density

$$2\,\beta^2\,\mathcal{W}^2+\alpha^2\,\beta^2\,h_{\alpha\mu\nu}\,h^{\alpha\mu\nu}-3\,\alpha^2\,\beta^2\,h^{\alpha}{}_{\alpha}{}^{\mu}\,h_{\mu}{}^{\nu}{}_{\nu}+$$
$$\frac{1}{2}\,\mathcal{W}\,\partial_\alpha\partial^\alpha\mathcal{W}+\alpha\,\beta\,h_{\alpha}{}^{\mu}{}_{\mu}\,\partial^\alpha\mathcal{W}-\frac{3}{2}\,\alpha^2\,h^{\alpha}{}_{\alpha}{}^{\mu}\,\partial_\rho\partial_\mu h^{\nu}{}_{\nu}{}^{\rho}-$$
$$3\,\alpha^2\,h^{\alpha\mu\nu}\,\partial_\rho\partial_\nu h_{\alpha\mu}{}^{\rho}+6\,\alpha^2\,h^{\alpha}{}_{\alpha}{}^{\mu}\,\partial_\rho\partial_\nu h_{\mu}{}^{\nu\rho}+$$
$$\alpha^2\,h^{\alpha\mu\nu}\,\partial_\rho\partial^\rho h_{\alpha\mu\nu}-3\,\alpha^2\,h^{\alpha}{}_{\alpha}{}^{\mu}\,\partial_\rho\partial^\rho h_{\mu}{}^{\nu}{}_{\nu}$$

Added source term: $\mathcal{W}\,j+h^{\alpha\beta\chi}\,\mathcal{F}_{\alpha\beta\chi}$

(No source constraints)

	$j_{0^+}^{\#1}$	$\mathcal{F}_{0^+}^{\#1}$	$\mathcal{F}_{0^+}^{\#2}$
$j_{0^+}^{\#1}\,\dagger$	$\frac{5\,\beta^2+k^2}{10\,\beta^4}$	$-\frac{i\,k\,(\beta^2+3\,k^2)}{20\,\alpha\,\beta^5}$	$\frac{i\,k\,(-\beta^2+k^2)}{20\,\alpha\,\beta^5}$
$\mathcal{F}_{0^+}^{\#1}\,\dagger$	$\frac{i\,k\,(\beta^2+3\,k^2)}{20\,\alpha\,\beta^5}$	$\frac{16\,\beta^4-39\,\beta^2\,k^2+9\,k^4}{40\,\alpha^2\,\beta^6}$	$-\frac{24\,\beta^4-17\,\beta^2\,k^2+3\,k^4}{40\,\alpha^2\,\beta^6}$
$\mathcal{F}_{0^+}^{\#2}\,\dagger$	$\frac{i\,(\beta-k)\,k\,(\beta+k)}{20\,\alpha\,\beta^5}$	$-\frac{24\,\beta^4-17\,\beta^2\,k^2+3\,k^4}{40\,\alpha^2\,\beta^6}$	$\frac{16\,\beta^4-7\,\beta^2\,k^2+k^4}{40\,\alpha^2\,\beta^6}$

	$\mathcal{W}_{0^+}^{\#1}$	$h_{0^+}^{\#1}$	$h_{0^+}^{\#2}$
$\mathcal{W}_{0^+}^{\#1}\,\dagger$	$2\,\beta^2-\frac{k^2}{2}$	$-\frac{1}{2}\,i\,\alpha\,\beta\,k$	$-\frac{1}{2}\,i\,\alpha\,\beta\,k$
$h_{0^+}^{\#1}\,\dagger$	$\frac{1}{2}\,i\,\alpha\,\beta\,k$	$\frac{1}{2}\,\alpha^2\,(-4\,\beta^2+k^2)$	$\frac{3}{2}\,\alpha^2\,(-2\,\beta^2+k^2)$
$h_{0^+}^{\#2}\,\dagger$	$\frac{1}{2}\,i\,\alpha\,\beta\,k$	$\frac{3}{2}\,\alpha^2\,(-2\,\beta^2+k^2)$	$\frac{1}{2}\,\alpha^2\,(-4\,\beta^2+9\,k^2)$

	$h_{1^-}^{\#1}{}_{\alpha}$	$h_{1^-}^{\#2}{}_{\alpha}$
$h_{1^-}^{\#1}\,\dagger^{\alpha}$	0	$-\sqrt{5}\,\alpha^2\,\beta^2$
$h_{1^-}^{\#2}\,\dagger^{\alpha}$	$-\sqrt{5}\,\alpha^2\,\beta^2$	$4\,\alpha^2\,(-\beta^2+k^2)$

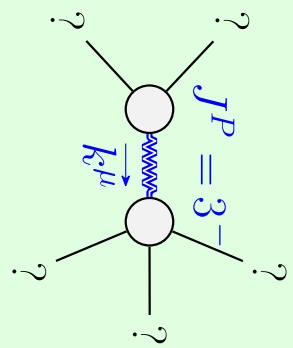
	$\mathcal{F}_{1^-}^{\#1}{}_{\alpha}$	$\mathcal{F}_{1^-}^{\#2}{}_{\alpha}$
$\mathcal{F}_{1^-}^{\#1}\,\dagger^{\alpha}$	$\frac{4\,(\beta-k)\,(\beta+k)}{5\,\alpha^2\,\beta^4}$	$-\frac{1}{\sqrt{5}\,\alpha^2\,\beta^2}$
$\mathcal{F}_{1^-}^{\#2}\,\dagger^{\alpha}$	$-\frac{1}{\sqrt{5}\,\alpha^2\,\beta^2}$	0

$$\mathcal{F}_{3^-}^{\#1}\,\dagger^{\alpha\beta\chi}\;\boxed{\frac{1}{\alpha^2\,(\beta^2-k^2)}}\qquad\mathcal{F}_{3^-}^{\#1}{}_{\alpha\beta\chi}$$

$$\mathcal{F}_{2^+}^{\#1}\,\dagger^{\alpha\beta}\;\boxed{\frac{1}{\alpha^2\,\beta^2}}\qquad\mathcal{F}_{2^+}^{\#1}{}_{\alpha\beta}$$

$$h_{2^+}^{\#1}\,\dagger^{\alpha\beta}\;\boxed{\alpha^2\,\beta^2}\qquad h_{2^+}^{\#1}{}_{\alpha\beta}$$

$$h_{3^-}^{\#1}\,\dagger^{\alpha\beta\chi}\;\boxed{\alpha^2\,(\beta-k)\,(\beta+k)}\qquad h_{3^-}^{\#1}{}_{\alpha\beta\chi}$$



Massive particle	
Pole residue:	$\frac{1}{\alpha^2} > 0$
Polarisations:	7
Square mass:	$\beta^2 > 0$
Spin:	3
Parity:	Odd

Unitarity conditions

$\alpha < 0 \,||\, \alpha > 0 \;\&\&\; \beta < 0 \,||\, \beta > 0$

(No massless particles)