	$\sigma_{1^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{1^+}^{\#2}{}_{\alpha\beta}$	$\tau_{1^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{1^-}^{\#1}{}_{\alpha}$	$\sigma_{1^-}^{\#2}{}_{\alpha}$	$\tau_{1^-}^{\#1}{}_{\alpha}$	$\tau_{1^-}^{\#2}{}_{\alpha}$
$\sigma_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	0	$-\frac{\sqrt{2}}{t_1+k^2 t_1}$	$-\frac{i\sqrt{2}\,k}{t_1+k^2 t_1}$	0	0	0	0
$\sigma_{1^+}^{\#2}{}^{\dagger\alpha\beta}$	$-\frac{\sqrt{2}}{t_1+k^2 t_1}$	$\frac{-2k^2(2r_1+r_5)+t_1}{(1+k^2)^2 t_1{}^2}$	$\frac{-2ik^3(2r_1+r_5)+ikt_1}{(1+k^2)^2 t_1{}^2}$	0	0	0	0
$\tau_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{i\sqrt{2}\,k}{t_1+k^2 t_1}$	$\frac{i(2k^3(2r_1+r_5)-kt_1)}{(1+k^2)^2 t_1{}^2}$	$\frac{-2k^4(2r_1+r_5)+k^2 t_1}{(1+k^2)^2 t_1{}^2}$	0	0	0	0
$\sigma_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	$\frac{1}{k^2(r_1+r_5)}$	$-\frac{1}{\sqrt{2}\,(k^2+2k^4)(r_1+r_5)}$	0	$-\frac{i}{k(1+2k^2)(r_1+r_5)}$
$\sigma_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	$-\frac{1}{\sqrt{2}\,(k^2+2k^4)(r_1+r_5)}$	$\frac{6k^2(r_1+r_5)+t_1}{2(k+2k^3)^2(r_1+r_5)t_1}$	0	$\frac{i(6k^2(r_1+r_5)+t_1)}{\sqrt{2}\,k(1+2k^2)^2(r_1+r_5)t_1}$
$\tau_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	0	0	0	0
$\tau_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	$\frac{i}{k(1+2k^2)(r_1+r_5)}$	$-\frac{i(6k^2(r_1+r_5)+t_1)}{\sqrt{2}\,k(1+2k^2)^2(r_1+r_5)t_1}$	0	$\frac{6k^2(r_1+r_5)+t_1}{(1+2k^2)^2(r_1+r_5)t_1}$

	$\omega_{1^+}^{\#1}{}_{\alpha\beta}$	$\omega_{1^+}^{\#2}{}_{\alpha\beta}$	$f_{1^+}^{\#1}{}_{\alpha\beta}$	$\omega_{1^-}^{\#1}{}_{\alpha}$	$\omega_{1^-}^{\#2}{}_{\alpha}$	$f_{1^-}^{\#1}{}_{\alpha}$	$f_{1^-}^{\#2}{}_{\alpha}$
$\omega_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$k^2(2r_1+r_5)-\frac{t_1}{2}$	$-\frac{t_1}{\sqrt{2}}$	$-\frac{ikt_1}{\sqrt{2}}$	0	0	0	0
$\omega_{1^+}^{\#2}{}^{\dagger\alpha\beta}$	$-\frac{t_1}{\sqrt{2}}$	0	0	0	0	0	0
$f_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{ikt_1}{\sqrt{2}}$	0	0	0	0	0	0
$\omega_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	$k^2(r_1+r_5)+\frac{t_1}{6}$	$\frac{t_1}{3\sqrt{2}}$	0	$\frac{ikt_1}{3}$
$\omega_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	$\frac{t_1}{3\sqrt{2}}$	$\frac{t_1}{3}$	0	$\frac{1}{3}i\sqrt{2}\,kt_1$
$f_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	0	0	0	0
$f_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	$-\frac{1}{3}ikt_1$	$-\frac{1}{3}i\sqrt{2}\,kt_1$	0	$\frac{2k^2t_1}{3}$

Added source term: $f^{\alpha\beta}\,\tau_{\alpha\beta}+\omega^{\alpha\beta\chi}\,\sigma_{\alpha\beta\chi}$

Lagrangian density

$$-\frac{1}{3}t_1\,\omega_{\ }^{\alpha\prime}{}_{\kappa\alpha}\,\omega_{\ }^{\kappa}{}_{\kappa\lambda}-t_1\,\omega_{\ }^{\kappa\lambda}{}_{\kappa\lambda}{}'\,r_5\,\partial_\alpha\omega_{\ }^{\kappa\lambda}{}_{\lambda\ }^{\alpha}-\frac{2}{3}r_1\,\partial_\theta\omega_{\alpha\beta}^{\ \ \kappa}\,\partial_\kappa\omega^{\alpha\beta\theta}+\frac{2}{3}r_1\,\partial_\theta\omega_{\alpha\beta}^{\ \ \kappa}\,\partial_\kappa\omega^{\theta\alpha\beta}-r_5\,\partial_\alpha\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_\kappa\omega^{\theta\lambda}+$$
$$r_5\,\partial_\theta\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_\kappa\omega^{\theta\kappa\lambda}-r_5\,\partial_\alpha\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_\kappa\omega^{\kappa\lambda\theta}+2\,r_5\,\partial_\theta\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_\kappa\omega^{\kappa\lambda\theta}-$$
$$\frac{1}{2}t_1\,\partial^\alpha f_{\theta\kappa}\,\partial^\kappa f_{\alpha\ }^{\ \theta}-\frac{1}{2}t_1\,\partial^\alpha f_{\kappa\theta}\,\partial^\kappa f_{\alpha\ }^{\ \theta}-\frac{1}{2}t_1\,\partial^\alpha f_{\kappa\ }^{\ \lambda}\,\partial^\kappa f_{\alpha\lambda}+$$
$$\frac{1}{3}t_1\,\omega_{\kappa\alpha}^{\ \ \alpha}\,\partial^\kappa f_{\ \ }^{\prime}{}_{\ }^{\ }+\frac{1}{3}t_1\,\omega_{\kappa\lambda}^{\ \ \lambda}\,\partial^\kappa f_{\ \ }^{\prime}{}_{\ }^{\ }+\frac{2}{3}t_1\,\partial^\alpha f_{\kappa\alpha}\,\partial^\kappa f_{\ \ }^{\prime}{}_{\ }^{\ }-\frac{1}{3}t_1\,\partial_\kappa f^{\lambda}{}_{\lambda}\,\partial^\kappa f_{\ \ }^{\prime}{}_{\ }^{\ }+$$
$$2\,t_1\,\omega_{\iota\kappa\theta}\,\partial^\kappa f^{\prime\theta}{}_{\ }^{\iota}-\frac{1}{3}t_1\,\omega_{\iota\alpha}^{\ \ \alpha}\,\partial^\kappa f_{\ \ }^{\prime}{}_{\kappa}^{\iota}-\frac{1}{3}t_1\,\omega_{\iota\lambda}^{\ \ \lambda}\,\partial^\kappa f_{\ \ }^{\prime}{}_{\kappa}^{\iota}+\frac{1}{2}t_1\,\partial^\alpha f^{\lambda}{}_{\kappa}\,\partial^\kappa f_{\lambda\alpha}+$$
$$\frac{1}{2}t_1\,\partial_\kappa f_{\ \theta}^{\lambda}\,\partial^\kappa f_{\lambda\ }^{\ \theta}+\frac{1}{2}t_1\,\partial_\kappa f^{\lambda}{}_{\ \theta}\,\partial^\kappa f_{\lambda\ }^{\ \theta}-\frac{1}{3}t_1\,\partial^\alpha f_{\ \alpha}^{\lambda}\,\partial^\kappa f_{\lambda\kappa}+$$
$$\frac{2}{3}r_1\,\partial_\kappa\omega^{\alpha\beta\theta}\,\partial^\kappa\omega_{\alpha\beta\theta}-\frac{2}{3}r_1\,\partial_\kappa\omega^{\theta\alpha\beta}\,\partial^\kappa\omega_{\alpha\beta\theta}+\frac{2}{3}r_1\,\partial^\beta\omega_{\ }^{\prime}{}_{\ }^{\alpha\lambda}\,\partial_\lambda\omega_{\alpha\beta}{}^{\prime}-$$
$$\frac{8}{3}r_1\,\partial^\beta\omega_{\ }^{\prime}{}_{\ }^{\lambda\alpha}\,\partial_\lambda\omega_{\alpha\beta}{}^{\prime}+r_5\,\partial_\alpha\omega_{\lambda\ \theta}^{\ \alpha}\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa}-r_5\,\partial_\theta\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa}$$

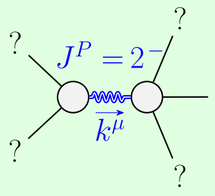
Source constraints	#
SO(3) irreps	#
$\sigma_{0^+}^{\#1}==0$	1
$\tau_{0^+}^{\#1}==0$	1
$\tau_{0^+}^{\#2}==0$	1
$\tau_{1^-}^{\#2\,\alpha}+2\,i\,k\,\sigma_{1^-}^{\#2\,\alpha}==0$	3
$\tau_{1^-}^{\#1\,\alpha}==0$	3
$\tau_{1^+}^{\#1\,\alpha\beta}+i\,k\,\sigma_{1^+}^{\#2\,\alpha\beta}==0$	3
$\tau_{2^+}^{\#1\,\alpha\beta}-2\,i\,k\,\sigma_{2^+}^{\#1\,\alpha\beta}==0$	5
Total #:	17

	$\sigma_{2^+}^{\#1}{}_{\alpha\beta}$	$\tau_{2^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{2}{(1+2k^2)^2 t_1}$	$-\frac{2i\sqrt{2}\,k}{(1+2k^2)^2 t_1}$	0
$\tau_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{2i\sqrt{2}\,k}{(1+2k^2)^2 t_1}$	$\frac{4k^2}{(1+2k^2)^2 t_1}$	0
$\sigma_{2^-}^{\#1}{}^{\dagger\alpha\beta\chi}$	0	0	$\frac{2}{2k^2 r_1+t_1}$

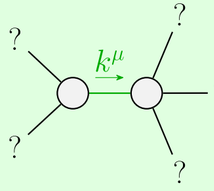
	$\omega_{2^+}^{\#1}{}^{\dagger\alpha\beta\chi}$	$f_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\omega_{2^+}^{\#1}{}^{\dagger\alpha\beta}$
$\omega_{2^+}^{\#1}{}_{\alpha\beta}$	0	$\frac{ikt_1}{\sqrt{2}}$	$\frac{t_1}{2}$
$f_{2^+}^{\#1}{}_{\alpha\beta}$	0	$k^2 t_1$	$-\frac{ikt_1}{\sqrt{2}}$
$\omega_{2^-}^{\#1}{}_{\alpha\beta\chi}$	$k^2 r_1+\frac{t_1}{2}$	0	0

	$\sigma_{0^+}^{\#1}$	$\tau_{0^+}^{\#1}$	$\tau_{0^+}^{\#2}$	$\sigma_{0^-}^{\#1}$
$\sigma_{0^+}^{\#1}{}^{\dagger}$	0	0	0	0
$\tau_{0^+}^{\#1}{}^{\dagger}$	0	0	0	0
$\tau_{0^+}^{\#2}{}^{\dagger}$	0	0	0	0
$\sigma_{0^-}^{\#1}{}^{\dagger}$	0	0	0	$-\frac{1}{t_1}$

	$\omega_{0^+}^{\#1}$	$f_{0^+}^{\#1}$	$f_{0^+}^{\#2}$	$\omega_{0^-}^{\#1}$
$\omega_{0^+}^{\#1}{}^{\dagger}$	0	0	0	0
$f_{0^+}^{\#1}{}^{\dagger}$	0	0	0	0
$f_{0^+}^{\#2}{}^{\dagger}$	0	0	0	0
$\omega_{0^-}^{\#1}{}^{\dagger}$	0	0	0	$-t_1$



Massive particle	
Pole residue:	$-\frac{1}{r_1}>0$
Polarisations:	5
Square mass:	$-\frac{t_1}{2r_1}>0$
Spin:	2
Parity:	Odd



Quadratic pole	
Pole residue:	$-\frac{1}{(r_1+r_5)t_1{}^2}>0$
Polarisations:	2

Unitarity conditions

$r_1 < 0$ && $r_5 < -r_1$ && $t_1 > 0$