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

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

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

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

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

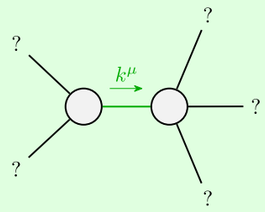
Source constraints

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

Lagrangian density

$$-\frac{1}{3}t_1\,\omega_{I}^{\alpha I}\,\omega_{\kappa\alpha}^{\ \ \kappa}-t_1\,\omega_{I}^{\kappa\lambda}\,\omega_{\kappa\lambda}^{\ \ \prime I}+f^{\alpha\beta}\,\tau_{\alpha\beta}+\omega^{\alpha\beta\chi}\,\sigma_{\alpha\beta\chi}-r_5\,\partial_I\omega^{\kappa\lambda}{}_{\kappa}\,\partial^I\omega_{\lambda}^{\ \ \alpha}-$$
$$r_5\,\partial_\alpha\omega_{\lambda}^{\ \ \alpha}{}_{\theta}\,\partial_\kappa\omega^{\theta\kappa\lambda}-r_5\,\partial_\alpha\omega_{\lambda}^{\ \ \alpha}{}_{\theta}\,\partial_\kappa\omega^{\kappa\lambda\theta}+2\,r_5\,\partial_\theta\omega_{\lambda}^{\ \ \alpha}{}_{\alpha}\,\partial_\kappa\omega^{\kappa\lambda\theta}-$$
$$\frac{1}{2}t_1\,\partial^\alpha f_{\theta\kappa}\,\partial^\kappa f_{\alpha}^{\ \ \theta}-\frac{1}{2}t_1\,\partial^\alpha f_{\kappa\theta}\,\partial^\kappa f_{\alpha}^{\ \ \theta}+\frac{1}{3}t_1\,\omega_{\kappa\alpha}^{\ \ \alpha}\,\partial^\kappa f^{\prime}{}_{I}+$$
$$\frac{1}{3}t_1\,\omega_{\kappa\lambda}^{\ \ \lambda}\,\partial^\kappa f^{\prime}{}_{I}+\frac{2}{3}t_1\,\partial^\alpha f_{\kappa\alpha}\,\partial^\kappa f^{\prime}{}_{I}-\frac{1}{3}t_1\,\omega_{I\kappa\theta}\,\partial^\kappa f^{I\theta}-$$
$$\frac{1}{3}t_1\,\omega_{I\alpha}^{\ \ \alpha}\,\partial^\kappa f^{\prime}{}_{\kappa}-\frac{1}{3}t_1\,\omega_{I\lambda}^{\ \ \lambda}\,\partial^\kappa f^{\prime}{}_{\kappa}+\frac{1}{2}t_1\,\partial_\kappa f_{\theta}^{\ \ \lambda}\,\partial^\kappa f_{\lambda}^{\ \ \theta}+$$
$$\frac{1}{2}t_1\,\partial_\kappa f^{\lambda}{}_{\theta}\,\partial^\kappa f_{\lambda}^{\ \ \theta}-\frac{1}{3}t_1\,\partial^\alpha f^{\lambda}{}_{\alpha}\,\partial^\kappa f_{\lambda\kappa}+r_5\,\partial_\alpha\omega_{\lambda}^{\ \ \alpha}{}_{\theta}\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa}-r_5\,\partial_\theta\omega_{\lambda}^{\ \ \alpha}{}_{\alpha}\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa}$$

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



Quadratic pole

Pole residue:	$-\frac{1}{r_5\,{t_1}^2} > 0$
Polarisations:	2

Unitarity conditions

$r_5 < 0 \;\&\&\; t_1 < 0 \,||\, t_1 > 0$

(No massive particles)