Lagrangian density

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

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

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

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

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

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

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

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

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

(No massive particles)

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

Quadratic pole

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