	$\sigma^{\#1}_{1^+}{}_{\alpha\beta}$	$\sigma^{\#2}_{1^+}{}_{\alpha\beta}$	$\tau^{\#1}_{1^+}{}_{\alpha\beta}$	$\sigma^{\#1}_{1^-}{}_{\alpha}$	$\sigma^{\#2}_{1^-}{}_{\alpha}$	$\tau^{\#1}_{1^-}{}_{\alpha}$	$\tau^{\#2}_{1^-}{}_{\alpha}$
$\sigma^{\#1}_{1^+}\dagger^{\alpha\beta}$	$\frac{1}{k^2(2r_1+r_5)}$	0	0	0	0	0	0
$\sigma^{\#2}_{1^+}\dagger^{\alpha\beta}$	0	0	0	0	0	0	0
$\tau^{\#1}_{1^+}\dagger^{\alpha\beta}$	0	0	0	0	0	0	0
$\sigma^{\#1}_{1^-}\dagger^{\alpha}$	0	0	0	$\frac{1}{k^2(r_1+r_5)}$	$\frac{\sqrt{2}}{k^2(1+2k^2)(r_1+r_5)}$	0	$\frac{2i}{k(1+2k^2)(r_1+r_5)}$
$\sigma^{\#2}_{1^-}\dagger^{\alpha}$	0	0	0	$\frac{\sqrt{2}}{k^2(1+2k^2)(r_1+r_5)}$	$\frac{3k^2(r_1+r_5)+2t_3}{(k+2k^3)^2(r_1+r_5)t_3}$	0	$\frac{i\sqrt{2}(3k^2(r_1+r_5)+2t_3)}{k(1+2k^2)^2(r_1+r_5)t_3}$
$\tau^{\#1}_{1^-}\dagger^{\alpha}$	0	0	0	0	0	0	0
$\tau^{\#2}_{1^-}\dagger^{\alpha}$	0	0	0	$-\frac{2i}{k(1+2k^2)(r_1+r_5)}$	$-\frac{i\sqrt{2}(3k^2(r_1+r_5)+2t_3)}{k(1+2k^2)^2(r_1+r_5)t_3}$	0	$\frac{6k^2(r_1+r_5)+4t_3}{(1+2k^2)^2(r_1+r_5)t_3}$

	$\omega^{\#1}_{1^+}{}_{\alpha\beta}$	$\omega^{\#2}_{1^+}{}_{\alpha\beta}$	$f^{\#1}_{1^+}{}_{\alpha\beta}$	$\omega^{\#1}_{1^-}{}_{\alpha}$	$\omega^{\#2}_{1^-}{}_{\alpha}$	$f^{\#1}_{1^-}{}_{\alpha}$	$f^{\#2}_{1^-}{}_{\alpha}$
$\omega^{\#1}_{1^+}\dagger^{\alpha\beta}$	$k^2(2r_1+r_5)$	0	0	0	0	0	0
$\omega^{\#2}_{1^+}\dagger^{\alpha\beta}$	0	0	0	0	0	0	0
$f^{\#1}_{1^+}\dagger^{\alpha\beta}$	0	0	0	0	0	0	0
$\omega^{\#1}_{1^-}\dagger^{\alpha}$	0	0	0	$k^2(r_1+r_5)+\frac{2t_3}{3}$	$-\frac{\sqrt{2}t_3}{3}$	0	$-\frac{2}{3}ikt_3$
$\omega^{\#2}_{1^-}\dagger^{\alpha}$	0	0	0	$-\frac{\sqrt{2}t_3}{3}$	$\frac{t_3}{3}$	0	$\frac{1}{3}i\sqrt{2}kt_3$
$f^{\#1}_{1^-}\dagger^{\alpha}$	0	0	0	0	0	0	0
$f^{\#2}_{1^-}\dagger^{\alpha}$	0	0	0	$\frac{2ikt_3}{3}$	$-\frac{1}{3}i\sqrt{2}kt_3$	0	$\frac{2k^2t_3}{3}$

Lagrangian density

$$\frac{2}{3}t_3\,\omega_{\iota}{}^{\alpha\iota}\,\omega_{\kappa\alpha}{}^{\kappa}-r_5\,\partial_{\iota}\omega^{\kappa\lambda}{}_{\kappa}\partial^{\iota}\omega_{\lambda}{}^{\alpha}{}_{\alpha}-\frac{2}{3}r_1\,\partial^{\beta}\omega^{\theta\alpha}{}_{\kappa}\partial_{\theta}\omega_{\alpha\beta}{}^{\kappa}-$$
$$\frac{2}{3}r_1\,\partial_{\theta}\omega_{\alpha\beta}{}^{\kappa}\partial_{\kappa}\omega^{\alpha\beta\theta}+\frac{2}{3}r_1\,\partial_{\theta}\omega_{\alpha\beta}{}^{\kappa}\partial_{\kappa}\omega^{\theta\alpha\beta}-r_5\,\partial_{\alpha}\omega_{\lambda}{}^{\alpha}{}_{\theta}\partial_{\kappa}\omega^{\theta\kappa\lambda}+$$
$$r_5\,\partial_{\theta}\omega_{\lambda}{}^{\alpha}{}_{\alpha}\partial_{\kappa}\omega^{\theta\kappa\lambda}-r_5\,\partial_{\alpha}\omega_{\lambda}{}^{\alpha}{}_{\theta}\partial_{\kappa}\omega^{\kappa\lambda\theta}+2r_5\,\partial_{\theta}\omega_{\lambda}{}^{\alpha}{}_{\alpha}\partial_{\kappa}\omega^{\kappa\lambda\theta}-$$
$$\frac{2}{3}t_3\,\omega_{\kappa\alpha}{}^{\alpha}\,\partial^{\kappa}f^{\iota}{}_{\iota}-\frac{2}{3}t_3\,\omega_{\kappa\lambda}{}^{\lambda}\,\partial^{\kappa}f^{\iota}{}_{\iota}-\frac{4}{3}t_3\,\partial^{\alpha}f_{\kappa\alpha}\partial^{\kappa}f^{\iota}{}_{\iota}+\frac{2}{3}t_3\,\partial_{\kappa}f^{\lambda}{}_{\lambda}\partial^{\kappa}f^{\iota}{}_{\iota}+$$
$$\frac{2}{3}t_3\,\omega_{\iota\alpha}{}^{\alpha}\,\partial^{\kappa}f^{\iota}{}_{\kappa}+\frac{2}{3}t_3\,\omega_{\iota\lambda}{}^{\lambda}\,\partial^{\kappa}f^{\iota}{}_{\kappa}+\frac{2}{3}t_3\,\partial^{\alpha}f^{\lambda}{}_{\alpha}\partial^{\kappa}f_{\lambda\kappa}+$$
$$\frac{2}{3}r_1\,\partial_{\kappa}\omega^{\alpha\beta\theta}\partial^{\kappa}\omega_{\alpha\beta\theta}-\frac{2}{3}r_1\,\partial_{\kappa}\omega^{\theta\alpha\beta}\partial^{\kappa}\omega_{\alpha\beta\theta}+\frac{2}{3}r_1\,\partial^{\beta}\omega_{\iota}{}^{\alpha\lambda}\partial_{\lambda}\omega_{\alpha\beta}{}^{\iota}-$$
$$\frac{8}{3}r_1\,\partial^{\beta}\omega_{\iota}{}^{\lambda\alpha}\partial_{\lambda}\omega_{\alpha\beta}{}^{\iota}+r_5\,\partial_{\alpha}\omega_{\lambda}{}^{\alpha}{}_{\theta}\partial^{\lambda}\omega^{\theta\kappa}{}_{\kappa}-r_5\,\partial_{\theta}\omega_{\lambda}{}^{\alpha}{}_{\alpha}\partial^{\lambda}\omega^{\theta\kappa}{}_{\kappa}$$

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

Source constraints

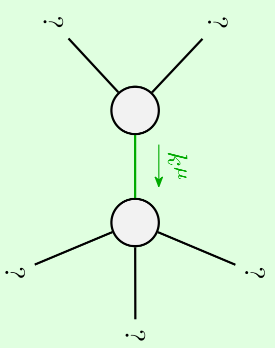
SO(3) irreps	#
$\sigma^{\#1}_{0^-}==0$	1
$\tau^{\#2}_{0^+}==0$	1
$\tau^{\#1}_{0^+}-2ik\,\sigma^{\#1}_{0^+}==0$	1
$\tau^{\#2}_{1^-}{}^{\alpha}+2ik\,\sigma^{\#2}_{1^-}{}^{\alpha}==0$	3
$\tau^{\#1}_{1^-}{}^{\alpha}==0$	3
$\tau^{\#1}_{1^+}{}^{\alpha\beta}==0$	3
$\sigma^{\#2}_{1^+}{}^{\alpha\beta}==0$	3
$\tau^{\#1}_{2^+}{}^{\alpha\beta}==0$	5
$\sigma^{\#1}_{2^+}{}^{\alpha\beta}==0$	5
Total #:	25

	$\sigma^{\#1}_{0^+}$	$\tau^{\#1}_{0^+}$	$\tau^{\#2}_{0^+}$	$\sigma^{\#1}_{0^-}$
$\sigma^{\#1}_{0^+}\dagger$	$\frac{1}{(1+2k^2)^2t_3}$	$-\frac{i\sqrt{2}k}{(1+2k^2)^2t_3}$	0	0
$\tau^{\#1}_{0^+}\dagger$	$\frac{i\sqrt{2}k}{(1+2k^2)^2t_3}$	$\frac{2k^2}{(1+2k^2)^2t_3}$	0	0
$\tau^{\#2}_{0^+}\dagger$	0	0	0	0
$\sigma^{\#1}_{0^-}\dagger$	0	0	0	0

	$\omega^{\#1}_{0^+}$	$f^{\#1}_{0^+}$	$f^{\#2}_{0^+}$	$\omega^{\#1}_{0^-}$
$\omega^{\#1}_{0^+}\dagger$	t_3	$-i\sqrt{2}kt_3$	0	0
$f^{\#1}_{0^+}\dagger$	$i\sqrt{2}kt_3$	$2k^2t_3$	0	0
$f^{\#2}_{0^+}\dagger$	0	0	0	0
$\omega^{\#1}_{0^-}\dagger$	0	0	0	0

	$\omega^{\#1}_{2^+}{}_{\alpha\beta}$	$f^{\#1}_{2^+}{}_{\alpha\beta}$	$\omega^{\#1}_{2^-}{}_{\alpha\beta\chi}$
$\omega^{\#1}_{2^+}\dagger^{\alpha\beta}$	0	0	0
$f^{\#1}_{2^+}\dagger^{\alpha\beta}$	0	0	0
$\omega^{\#1}_{2^-}\dagger^{\alpha\beta\chi}$	0	0	k^2r_1

	$\sigma^{\#1}_{2^+}{}_{\alpha\beta}$	$\tau^{\#1}_{2^+}{}_{\alpha\beta}$	$\sigma^{\#1}_{2^-}{}_{\alpha\beta\chi}$
$\sigma^{\#1}_{2^+}\dagger^{\alpha\beta}$	0	0	0
$\tau^{\#1}_{2^+}\dagger^{\alpha\beta}$	0	0	0
$\sigma^{\#1}_{2^-}\dagger^{\alpha\beta\chi}$	0	0	$\frac{1}{k^2r_1}$



Quadratic pole

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

Unitarity conditions

$r_1<0\,\&\&\,(r_5<-r_1\,\|\,r_5>-2r_1)\,\|\,r_1>0\,\&\&\,-2r_1<r_5<-r_1$

(No massive particles)