Lagrangian density

$$\omega^{\alpha\beta\chi}\,\sigma_{\alpha\beta\chi}\text{-}r_5\,\partial_l\omega^{\kappa\lambda}{}_{\kappa}{}'\omega_{\lambda\ \alpha}^{\ \alpha}\text{-}\frac{2}{3}r_1\,\partial^\beta\omega^{\theta\alpha}{}_{\kappa}{}'\partial_\theta\omega_{\alpha\beta}^{\ \ \kappa}\text{-}\frac{2}{3}r_1\,\partial_\theta\omega_{\alpha\beta}^{\ \ \kappa}\,\partial_\kappa\omega^{\alpha\beta\theta}+$$
$$\frac{2}{3}r_1\,\partial_\theta\omega_{\alpha\beta}^{\ \ \kappa}\,\partial_\kappa\omega^{\theta\alpha\beta}\text{-}r_5\,\partial_\alpha\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_\kappa\omega^{\theta\kappa\lambda}+r_5\,\partial_\theta\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_\kappa\omega^{\theta\kappa\lambda}\text{-}r_5\,\partial_\alpha\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_\kappa\omega^{\kappa\lambda\theta}+$$
$$2\,r_5\,\partial_\theta\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_\kappa\omega^{\kappa\lambda\theta}+\frac{2}{3}r_1\,\partial_\kappa\omega^{\alpha\beta\theta}\,\partial^\kappa\omega_{\alpha\beta\theta}\text{-}\frac{2}{3}r_1\,\partial_\kappa\omega^{\theta\alpha\beta}\,\partial^\kappa\omega_{\alpha\beta\theta}+$$
$$\frac{2}{3}r_1\,\partial^\beta\omega_l{}^{\alpha\lambda}\,\partial_\lambda\omega_{\alpha\beta}{}'\text{-}\frac{8}{3}r_1\,\partial^\beta\omega_l{}^{\lambda\alpha}\,\partial_\lambda\omega_{\alpha\beta}{}'+r_5\,\partial_\alpha\omega_{\lambda\ \theta}^{\ \alpha}\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa}\text{-}r_5\,\partial_\theta\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa}$$

Source constraints

SO(3) irreps	#
$\sigma_{0^-}^{\#1} == 0$	1
$\sigma_{0^+}^{\#1} == 0$	1
$\sigma_{1^-}^{\#2\,\alpha} == 0$	3
$\sigma_{1^+}^{\#2\,\alpha\beta} == 0$	3
$\sigma_{2^+}^{\#1\,\alpha\beta} == 0$	5
Total #:	13

	$\omega_{1^+\,\alpha\beta}^{\#1}$	$\omega_{1^+\,\alpha\beta}^{\#2}$	$\omega_{1^-\,\alpha}^{\#1}$	$\omega_{1^-\,\alpha}^{\#2}$
$\omega_{1^+}^{\#1\,\alpha\beta}\,\dagger$	$k^2\,(2\,r_1+r_5)$	0	0	0
$\omega_{1^+}^{\#2\,\alpha\beta}\,\dagger$	0	0	0	0
$\omega_{1^-}^{\#1\,\alpha}\,\dagger$	0	0	$k^2\,(r_1+r_5)$	0
$\omega_{1^-}^{\#2\,\alpha}\,\dagger$	0	0	0	0

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

	$\sigma_{0^+}^{\#1}$	$\sigma_{0^-}^{\#1}$
$\sigma_{0^+}^{\#1}\,\dagger$	0	0
$\sigma_{0^-}^{\#1}\,\dagger$	0	0

	$\sigma_{2^+\,\alpha\beta}^{\#1}$	$\sigma_{2^-\,\alpha\beta\chi}^{\#1}$
$\sigma_{2^+}^{\#1\,\alpha\beta}\,\dagger$	0	0
$\sigma_{2^-}^{\#1\,\alpha\beta\chi}\,\dagger$	0	$\frac{1}{k^2\,r_1}$

	$\omega_{2^+\,\alpha\beta}^{\#1}$	$\omega_{2^-\,\alpha\beta\chi}^{\#1}$
$\omega_{2^+}^{\#1\,\alpha\beta}\,\dagger$	0	0
$\omega_{2^-}^{\#1\,\alpha\beta\chi}\,\dagger$	0	$k^2\,r_1$

	$\sigma_{1^+\,\alpha\beta}^{\#1}$	$\sigma_{1^+\,\alpha\beta}^{\#2}$	$\sigma_{1^-\,\alpha}^{\#1}$	$\sigma_{1^-\,\alpha}^{\#2}$
$\sigma_{1^+}^{\#1\,\alpha\beta}\,\dagger$	$\frac{1}{k^2\,(2\,r_1+r_5)}$	0	0	0
$\sigma_{1^+}^{\#2\,\alpha\beta}\,\dagger$	0	0	0	0
$\sigma_{1^-}^{\#1\,\alpha}\,\dagger$	0	0	$\frac{1}{k^2\,(r_1+r_5)}$	0
$\sigma_{1^-}^{\#2\,\alpha}\,\dagger$	0	0	0	0

Quadratic pole

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

Unitarity conditions

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

(No massive particles)