Lagrangian density

$$-\frac{1}{2}\,r_3\,\partial_\iota\omega^{\kappa\lambda}{}_{\kappa}\,\partial^\iota\omega_\lambda{}^\alpha{}_\alpha - r_5\,\partial_\iota\omega^{\kappa\lambda}{}_{\kappa}\,\partial^\iota\omega_\lambda{}^\alpha{}_\alpha +$$
$$\frac{2}{3}\,r_2\,\partial^\beta\omega^{\theta\alpha}{}_{\kappa}\,\partial_\theta\omega_{\alpha\beta}{}^{\kappa} - \frac{1}{3}\,r_2\,\partial_\theta\omega_{\alpha\beta}{}^{\kappa}\,\partial_\kappa\omega^{\alpha\beta\theta} -$$
$$\frac{2}{3}\,r_2\,\partial_\theta\omega_{\alpha\beta}{}^{\kappa}\,\partial_\kappa\omega^{\theta\alpha\beta} + \frac{1}{2}\,r_3\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial_\kappa\omega^{\theta\kappa\lambda} - r_5\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial_\kappa\omega^{\theta\kappa\lambda} -$$
$$\frac{1}{2}\,r_3\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial_\kappa\omega^{\theta\kappa\lambda} + r_5\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial_\kappa\omega^{\theta\kappa\lambda} - \frac{1}{2}\,r_3\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial_\kappa\omega^{\kappa\lambda\theta} -$$
$$r_5\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial_\kappa\omega^{\kappa\lambda\theta} + r_3\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial_\kappa\omega^{\kappa\lambda\theta} + 2\,r_5\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial_\kappa\omega^{\kappa\lambda\theta} +$$
$$\frac{1}{3}\,r_2\,\partial_\kappa\omega^{\alpha\beta\theta}\,\partial^\kappa\omega_{\alpha\beta\theta} + \frac{2}{3}\,r_2\,\partial_\kappa\omega^{\theta\alpha\beta}\,\partial^\kappa\omega_{\alpha\beta\theta} - \frac{2}{3}\,r_2\,\partial^\beta\omega_\iota{}^{\alpha\lambda}\,\partial_\lambda\omega_{\alpha\beta}{}^{\iota} +$$
$$\frac{2}{3}\,r_2\,\partial^\beta\omega_\iota{}^{\lambda\alpha}\,\partial_\lambda\omega_{\alpha\beta}{}^{\iota} - 4\,r_3\,\partial^\beta\omega_\iota{}^{\lambda\alpha}\,\partial_\lambda\omega_{\alpha\beta}{}^{\iota} - \frac{1}{2}\,r_3\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa} +$$
$$r_5\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa} + \frac{1}{2}\,r_3\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa} - r_5\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial^\lambda\omega^{\theta\kappa}{}_{\kappa}$$

Added source term: $\omega^{\alpha\beta\chi}\ \sigma_{\alpha\beta\chi}$

	$\omega_{1^+}^{\#1}{}_{\alpha\beta}$	$\omega_{1^+}^{\#2}{}_{\alpha\beta}$	$\omega_{1^-}^{\#1}{}_{\alpha}$	$\omega_{1^-}^{\#2}{}_{\alpha}$
$\omega_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$k^2\,(2\,r_3+r_5)$	0	0	0
$\omega_{1^+}^{\#2}{}^{\dagger\alpha\beta}$	0	0	0	0
$\omega_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	$\frac{1}{2}\,k^2\,(r_3+2\,r_5)$	0
$\omega_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	0

	$\sigma_{0^-}^{\#1}{}^{\dagger}$	$\sigma_{0^+}^{\#1}{}^{\dagger}$
$\sigma_{0^+}^{\#1}$	0	0
$\sigma_{0^-}^{\#1}$	$\frac{1}{k^2\,r_2}$	0

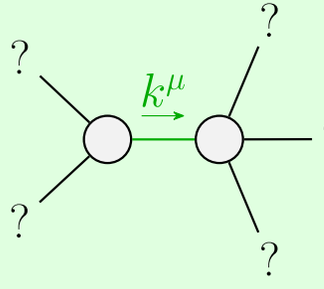
	$\omega_{0^-}^{\#1}{}^{\dagger}$	$\omega_{0^+}^{\#1}{}^{\dagger}$
$\omega_{0^+}^{\#1}$	0	0
$\omega_{0^-}^{\#1}$	$k^2\,r_2$	0

	$\sigma_{1^-}^{\#2}{}^{\dagger\alpha}$	$\sigma_{1^-}^{\#1}{}^{\dagger\alpha}$	$\sigma_{1^+}^{\#2}{}^{\dagger\alpha\beta}$	$\sigma_{1^+}^{\#1}{}^{\dagger\alpha\beta}$
$\sigma_{1^+}^{\#1}{}_{\alpha\beta}$	0	0	0	$\frac{1}{k^2\,(2\,r_3+r_5)}$
$\sigma_{1^+}^{\#2}{}_{\alpha\beta}$	0	0	0	0
$\sigma_{1^-}^{\#1}{}_{\alpha}$	0	$\frac{2}{k^2\,(r_3+2\,r_5)}$	0	0
$\sigma_{1^-}^{\#2}{}_{\alpha}$	0	0	0	0

	$\omega_{2^+}^{\#1}{}_{\alpha\beta}$	$\omega_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\omega_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$-\frac{3\,k^2\,r_3}{2}$	0
$\omega_{2^-}^{\#1}{}^{\dagger\alpha\beta\chi}$	0	0

	$\sigma_{2^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$-\frac{2}{3\,k^2\,r_3}$	0
$\sigma_{2^-}^{\#1}{}^{\dagger\alpha\beta\chi}$	0	0

Source constraints	SO(3) irreps	#
$\sigma_{0^+}^{\#1} == 0$	1	3
$\sigma_{1^-}^{\#2\,\alpha} == 0$	3	3
$\sigma_{1^+}^{\#2\,\alpha\beta} == 0$	3	3
$\sigma_{2^-}^{\#1\,\alpha\beta\chi} == 0$	5	5
Total #:		12



Quadratic pole

Pole residue:	$-\frac{1}{r_3\,(2\,r_3+r_5)\,(r_3+2\,r_5)} > 0$
Polarisations:	2

Unitarity conditions

$$r_3 < 0\ \&\&\ (r_5 < -\frac{r_3}{2}\ ||\ r_5 > -2\,r_3) \ ||\ r_3 > 0\ \&\&\ -2\,r_3 < r_5 < -\frac{r_3}{2}$$

(No massive particles)