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

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

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

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

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

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

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

(No massive particles)

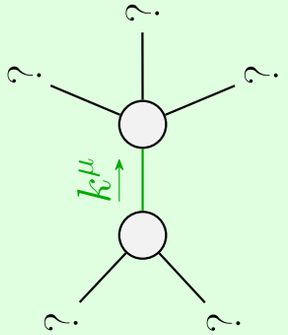
Lagrangian density

$$
\begin{aligned}
&-\tfrac{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} + \\
&\tfrac{2}{3}\,r_2\,\partial^\beta\omega^{\theta\alpha}{}_{\kappa}\,\partial_\theta\omega_{\alpha\beta}{}^{\kappa} - \tfrac{1}{3}\,r_2\,\partial_\theta\omega_{\alpha\beta}{}^{\kappa}\,\partial_\kappa\omega^{\alpha\beta\theta} - \\
&\tfrac{2}{3}\,r_2\,\partial_\theta\omega_{\alpha\beta}{}^{\kappa}\,\partial_\kappa\omega^{\theta\alpha\beta} + \tfrac{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} - \\
&\tfrac{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} - \tfrac{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} + \\
&\tfrac{1}{3}\,r_2\,\partial_\kappa\omega^{\alpha\beta\theta}\,\partial^\kappa\omega_{\alpha\beta\theta} + \tfrac{2}{3}\,r_2\,\partial_\kappa\omega^{\theta\alpha\beta}\,\partial^\kappa\omega_{\alpha\beta\theta} - \tfrac{2}{3}\,r_2\,\partial^\beta\omega_{\iota}{}^{\alpha\lambda}\,\partial_\lambda\omega_{\alpha\beta}{}^{\iota} + \\
&\tfrac{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} - \tfrac{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} + \tfrac{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}
\end{aligned}
$$

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

Quadratic pole

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



Unitarity conditions

$$r_3 < 0 \;\&\&\; \left(r_5 < -\tfrac{r_3}{2} \;||\; r_5 > -2\,r_3\right) \;||\; r_3 > 0 \;\&\&\; -2\,r_3 < r_5 < -\tfrac{r_3}{2}$$