	$\omega_{1^+}^{\#1}{}_{\alpha\beta}$	$\omega_{1^+}^{\#2}{}_{\alpha\beta}$	$f_{1^+}^{\#1}{}_{\alpha\beta}$	$\omega_{1^-}^{\#1}{}_{\alpha}$	$\omega_{1^-}^{\#2}{}_{\alpha}$	$f_{1^-}^{\#1}{}_{\alpha}$	$f_{1^-}^{\#2}{}_{\alpha}$
$\omega_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$k^2\,(2\,r_3+r_5)-\frac{t_1}{2}$	$-\frac{t_1}{\sqrt{2}}$	$-\frac{i\,k\,t_1}{\sqrt{2}}$	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	$k^2\,(-r_1+2\,r_3+r_5)+\frac{t_1}{6}$	$\frac{t_1}{3\sqrt{2}}$	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	$\frac{2\,k^2\,t_1}{3}$

	$\omega_{2^+}^{\#1}{}_{\alpha\beta}$	$f_{2^+}^{\#1}{}_{\alpha\beta}$	$\omega_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\omega_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{t_1}{2}$	$-\frac{i\,k\,t_1}{\sqrt{2}}$	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	$k^2\,r_1+\frac{t_1}{2}$

	$\omega_{0^+}^{\#1}$	$f_{0^+}^{\#1}$	$f_{0^+}^{\#2}$	$\omega_{0^-}^{\#1}$
$\omega_{0^+}^{\#1}{}^{\dagger}$	$6\,k^2\,(-r_1+r_3)$	0	0	0
$f_{0^+}^{\#1}{}^{\dagger}$	0	0	0	0
$f_{0^+}^{\#2}{}^{\dagger}$	0	0	0	0
$\omega_{0^-}^{\#1}{}^{\dagger}$	0	0	0	$-t_1$

	$\sigma_{2^+}^{\#1}{}_{\alpha\beta}$	$\tau_{2^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{2}{(1+2\,k^2)^2\,t_1}$	$-\frac{2\,i\,\sqrt{2}\,k}{(1+2\,k^2)^2\,t_1}$	0
$\tau_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{2\,i\,\sqrt{2}\,k}{(1+2\,k^2)^2\,t_1}$	$\frac{4\,k^2}{(1+2\,k^2)^2\,t_1}$	0
$\sigma_{2^-}^{\#1}{}^{\dagger\alpha\beta\chi}$	0	0	$\frac{2}{2\,k^2\,r_1+t_1}$

	$\sigma_{1^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{1^+}^{\#2}{}_{\alpha\beta}$	$\tau_{1^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{1^-}^{\#1}{}_{\alpha}$	$\sigma_{1^-}^{\#2}{}_{\alpha}$	$\tau_{1^-}^{\#1}{}_{\alpha}$	$\tau_{1^-}^{\#2}{}_{\alpha}$
$\sigma_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	0	$-\frac{\sqrt{2}}{t_1+k^2\,t_1}$	$-\frac{i\,\sqrt{2}\,k}{t_1+k^2\,t_1}$	$\frac{1}{k^2\,(-r_1+2\,r_3+r_5)}$	$\frac{1}{\sqrt{2}\,(k^2+2\,k^4)\,(r_1-2\,r_3-r_5)}$	0	$\frac{i}{k\,(1+2\,k^2)\,(r_1-2\,r_3-r_5)}$
$\sigma_{1^+}^{\#2}{}^{\dagger\alpha\beta}$	$-\frac{\sqrt{2}}{t_1+k^2\,t_1}$	$-\frac{2\,k^2\,(2\,r_3+r_5)+t_1}{(1+k^2)^2\,t_1^2}$	$\frac{-2\,i\,k^3\,(2\,r_3+r_5)+i\,k\,t_1}{(1+k^2)^2\,t_1^2}$	$\frac{1}{\sqrt{2}\,(k^2+2\,k^4)\,(r_1-2\,r_3-r_5)}$	$\frac{\frac{1}{-r_1+2\,r_3+r_5}+\frac{6\,k^2}{t_1}}{2\,(k+2\,k^3)^2}$	0	$\frac{i\,(6\,k^2\,(r_1-2\,r_3-r_5)+t_1)}{\sqrt{2}\,k\,(1+2\,k^2)^2\,(r_1-2\,r_3-r_5)\,t_1}$
$\tau_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{i\,\sqrt{2}\,k}{t_1+k^2\,t_1}$	$\frac{i\,(2\,k^3\,(2\,r_3+r_5)-k\,t_1)}{(1+k^2)^2\,t_1^2}$	$\frac{-2\,k^4\,(2\,r_3+r_5)+k^2\,t_1}{(1+k^2)^2\,t_1^2}$	0	0	0	$\frac{i}{k\,(1+2\,k^2)\,(r_1-2\,r_3-r_5)}$
$\sigma_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	0	0	0	$\frac{i\,(6\,k^2\,(r_1-2\,r_3-r_5)+t_1)}{(1+2\,k^2)\,(r_1-2\,r_3-r_5)\,t_1}$
$\sigma_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	0	0	0	$\frac{1}{-r_1+2\,r_3+r_5}+\frac{6\,k^2}{t_1}$
$\tau_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	0	0	0	$\frac{1}{(1+2\,k^2)^2}$
$\tau_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	0	0	0	0

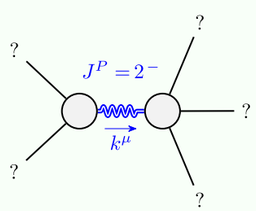
Lagrangian density

$$
\begin{aligned}
&-\tfrac{1}{3}\,t_1\,\omega_{\prime}^{\alpha\prime}\,\omega_{\kappa\alpha}^{\ \ \kappa}\,\text{-}t_1\,\omega_{\prime}^{\ \kappa\lambda}\,\omega_{\kappa\lambda}^{\ \ \prime}+f^{\alpha\beta}\,\tau_{\alpha\beta}+\omega^{\alpha\beta\chi}\,\sigma_{\alpha\beta\chi}+2\,r_1\,\partial_{\prime}\omega^{\kappa\lambda}{}_{\kappa}\,\partial^{\prime}\omega_{\lambda\ \alpha}^{\ \alpha}\,\text{-}\\
&2\,r_3\,\partial_{\prime}\omega^{\kappa\lambda}{}_{\kappa}\,\partial^{\prime}\omega_{\lambda\ \alpha}^{\ \alpha}\,\text{-}r_5\,\partial_{\prime}\omega^{\kappa\lambda}{}_{\kappa}\,\partial^{\prime}\omega_{\lambda\ \alpha}^{\ \alpha}\,\text{-}\tfrac{2}{3}\,r_1\,\partial_{\theta}\omega^{\theta\alpha}{}_{\kappa}\,\partial_{\alpha\beta}\omega_{\ \ \ \kappa}^{\alpha\beta\theta}+\\
&\tfrac{2}{3}\,r_1\,\partial_{\theta}\omega_{\alpha\beta}^{\ \ \ \kappa}\,\partial_{\kappa}\omega^{\theta\alpha\beta}\,\text{-}2\,r_1\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\theta\kappa\lambda}+2\,r_3\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\theta\kappa\lambda}+\\
&r_5\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\theta\kappa\lambda}+2\,r_1\,\partial_{\theta}\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_{\kappa}\omega^{\theta\kappa\lambda}\,\text{-}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}+2\,r_1\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\kappa\lambda\theta}\,\text{-}2\,r_3\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\kappa\lambda\theta}-\\
&r_5\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\kappa\lambda\theta}\,\text{-}4\,r_1\,\partial_{\theta}\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_{\kappa}\omega^{\kappa\lambda\theta}+4\,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}\,\text{-}\tfrac{1}{2}\,t_1\,\partial^{\alpha}f_{\theta\kappa}\,\partial^{\kappa}f_{\ \alpha}^{\theta}\,\text{-}\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_{\prime}^{\ \prime}+\tfrac{1}{3}\,t_1\,\omega_{\kappa\lambda}^{\ \ \lambda}\,\partial^{\kappa}f_{\prime}^{\ \prime}+\tfrac{2}{3}\,t_1\,\partial^{\alpha}f^{\lambda}{}_{\kappa}\,\partial^{\kappa}f_{\lambda\alpha}+\\
&2\,t_1\,\omega_{\prime\kappa\theta}\,\partial^{\kappa}f^{\prime\theta}\,\text{-}\tfrac{1}{3}\,t_1\,\omega_{\prime\alpha}^{\ \ \alpha}\,\partial^{\kappa}f^{\prime}{}_{\kappa}\,\text{-}\tfrac{1}{3}\,t_1\,\omega_{\prime\lambda}^{\ \ \lambda}\,\partial^{\kappa}f^{\prime}{}_{\kappa}+\\
&\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}\,\text{-}\tfrac{1}{3}\,t_1\,\partial^{\alpha}f^{\lambda}{}_{\kappa}\,\partial^{\kappa}f_{\lambda\alpha}+\tfrac{2}{3}\,r_1\,\partial_{\kappa}\omega^{\alpha\beta\theta}\,\partial^{\kappa}\omega_{\alpha\beta\theta}\,\text{-}\\
&\tfrac{2}{3}\,r_1\,\partial_{\kappa}\omega^{\theta\alpha\beta}\,\partial^{\kappa}\omega_{\alpha\beta\theta}+\tfrac{2}{3}\,r_1\,\partial^{\beta}\omega_{\prime}^{\ \lambda\alpha}\,\partial_{\lambda}\omega_{\alpha\beta}^{\ \ \prime}\,\text{-}\\
&4\,r_3\,\partial^{\beta}\omega_{\prime}^{\ \lambda\alpha}\,\partial_{\lambda}\omega_{\alpha\beta}^{\ \ \prime}+2\,r_1\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial^{\lambda}\omega^{\theta\kappa}{}_{\kappa}\,\text{-}2\,r_1\,\partial_{\theta}\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial^{\lambda}\omega^{\theta\kappa}{}_{\kappa}+\\
&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}+2\,r_3\,\partial_{\theta}\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial^{\lambda}\omega^{\theta\kappa}{}_{\kappa}
\end{aligned}
$$

Source constraints

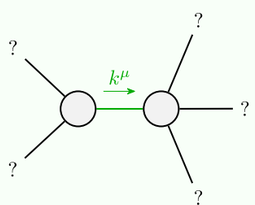
	#
SO(3) irreps	1
$\tau_{0^+}^{\#2} == 0$	1
$\tau_{0^+}^{\#1} == 0$	3
$\tau_{1^-}^{\#2\,\alpha} + 2\,i\,k\,\sigma_{1^-}^{\#2\,\alpha} == 0$	3
$\tau_{1^-}^{\#1\,\alpha} == 0$	3
$\tau_{1^+}^{\#1\,\alpha\beta} + i\,k\,\sigma_{1^+}^{\#2\,\alpha\beta} == 0$	5
$\tau_{2^+}^{\#1\,\alpha\beta} - 2\,i\,k\,\sigma_{2^+}^{\#1\,\alpha\beta} == 0$	16
Total #:	

	$\sigma_{0^+}^{\#1}$	$\tau_{0^+}^{\#1}$	$\tau_{0^+}^{\#2}$	$\sigma_{0^-}^{\#1}$
$\sigma_{0^+}^{\#1}{}^{\dagger}$	$\frac{1}{6\,k^2\,(-r_1+r_3)}$	0	0	0
$\tau_{0^+}^{\#1}{}^{\dagger}$	0	0	0	0
$\tau_{0^+}^{\#2}{}^{\dagger}$	0	0	0	0
$\sigma_{0^-}^{\#1}{}^{\dagger}$	0	0	0	$-\frac{1}{t_1}$



Massive particle

Pole residue:	$-\frac{1}{r_1} > 0$
Polarisations:	5
Square mass:	$-\frac{t_1}{2\,r_1} > 0$
Spin:	2
Parity:	Odd



Quadratic pole

Pole residue:	$\frac{1}{(r_1-2\,r_3-r_5)\,t_1^2} > 0$
Polarisations:	2

$r_1 < 0 \;\&\&\; r_5 < r_1 - 2\,r_3 \;\&\&\; t_1 > 0$