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

Lagrangian density

$$
\begin{aligned}
&-t_1\,\omega_{\prime}^{\alpha\prime}\,\omega_{\kappa\alpha}^{\ \ \kappa}-t_1\,\omega_{\prime}^{\ \kappa\lambda}\,\omega_{\kappa\lambda}^{\ \ \prime}+f^{\alpha\beta}\,\tau_{\alpha\beta}+\omega^{\alpha\beta\chi}\,\sigma_{\alpha\beta\chi}+r_1\,\partial_{\prime}\omega^{\kappa\lambda}\,\partial^{\prime}\omega_{\kappa\lambda}^{\ \ \alpha}-\\
&\frac{2}{3}r_1\,\partial^{\beta}\omega^{\theta\alpha}\,\partial_{\theta}\omega_{\kappa\alpha}^{\ \ \kappa}-\frac{2}{3}r_1\,\partial_{\theta}\omega_{\alpha\beta}^{\ \ \kappa}\,\partial_{\kappa}\omega^{\theta\alpha\beta}+\frac{2}{3}r_1\,\partial_{\kappa}\omega^{\theta\alpha\beta}+\\
&r_1\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\theta\kappa\lambda}-r_1\,\partial_{\theta}\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_{\kappa}\omega^{\kappa\lambda\theta}+r_1\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial_{\kappa}\omega^{\kappa\lambda\theta}-2\,r_1\,\partial_{\theta}\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial_{\kappa}\omega^{\kappa\lambda\theta}-\\
&\frac{1}{2}t_1\,\partial^{\alpha}f_{\theta\kappa}\,\partial^{\kappa}f_{\alpha}^{\ \theta}-\frac{1}{2}t_1\,\partial^{\alpha}f_{\kappa\theta}\,\partial^{\kappa}f_{\alpha}^{\ \theta}-\frac{1}{2}t_1\,\partial^{\alpha}f^{\lambda}{}_{\kappa}\,\partial^{\kappa}f_{\alpha\lambda}+t_1\,\omega_{\kappa\alpha}^{\ \ \alpha}\,\partial^{\kappa}f^{\prime}{}_{\prime}+\\
&t_1\,\omega_{\kappa\lambda}^{\ \ \lambda}\,\partial^{\kappa}f^{\prime}{}_{\prime}+2\,t_1\,\partial^{\alpha}f_{\kappa\alpha}\,\partial^{\kappa}f^{\prime}{}_{\prime}-t_1\,\partial_{\kappa}f^{\lambda}{}_{\lambda}\,\partial^{\kappa}f^{\prime}{}_{\prime}+2\,t_1\,\omega_{\prime\kappa\theta}\,\partial^{\kappa}f^{\prime\theta}-\\
&t_1\,\omega_{\prime\alpha}^{\ \ \alpha}\,\partial^{\kappa}f^{\prime}{}_{\kappa}-t_1\,\omega_{\prime\lambda}^{\ \ \lambda}\,\partial^{\kappa}f^{\prime}{}_{\kappa}+\frac{1}{2}t_1\,\partial^{\alpha}f^{\lambda}{}_{\kappa}\,\partial^{\kappa}f_{\lambda\alpha}+\frac{1}{2}t_1\,\partial_{\kappa}f_{\theta}^{\ \lambda}\,\partial^{\kappa}f_{\lambda}^{\ \theta}+\\
&\frac{1}{2}t_1\,\partial_{\kappa}f^{\lambda}{}_{\theta}\,\partial^{\kappa}f_{\lambda}^{\ \theta}-t_1\,\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_{\prime}^{\alpha\lambda}\,\partial_{\lambda}\omega_{\alpha\beta}^{\ \ \prime}-\frac{8}{3}r_1\,\partial^{\beta}\omega_{\prime}^{\lambda\alpha}\,\partial_{\lambda}\omega_{\alpha\beta}^{\ \ \prime}-r_1\,\partial_{\alpha}\omega_{\lambda\ \theta}^{\ \alpha}\,\partial^{\lambda}\omega^{\theta\kappa}{}_{\kappa}+r_1\,\partial_{\theta}\omega_{\lambda\ \alpha}^{\ \alpha}\,\partial^{\lambda}\omega^{\theta\kappa}{}_{\kappa}
\end{aligned}
$$

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

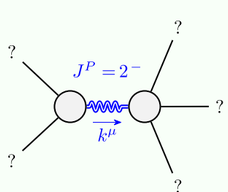
	$\omega_{0^+}^{\#1}$	$f_{0^+}^{\#1}$	$f_{0^+}^{\#2}$	$\omega_{0^-}^{\#1}$
$\omega_{0^+}^{\#1}{}^{\dagger}$	$-t_1$	$i\sqrt{2}\,k\,t_1$	0	0
$f_{0^+}^{\#1}{}^{\dagger}$	$-i\sqrt{2}\,k\,t_1$	$-2k^2 t_1$	0	0
$f_{0^+}^{\#2}{}^{\dagger}$	0	0	0	0
$\omega_{0^-}^{\#1}{}^{\dagger}$	0	0	0	$-t_1$

	$\omega_{1^+}^{\#1}{}^{\alpha\beta}$	$\omega_{1^+}^{\#2}{}^{\alpha\beta}$	$f_{1^+}^{\#1}{}^{\alpha\beta}$	$\omega_{1^-}^{\#1}{}^{\alpha}$	$\omega_{1^-}^{\#2}{}^{\alpha}$	$f_{1^-}^{\#1}{}^{\alpha}$	$f_{1^-}^{\#2}{}^{\alpha}$
$\omega_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$k^2 r_1-\frac{t_1}{2}$	$-\frac{t_1}{\sqrt{2}}$	$\frac{ikt_1}{\sqrt{2}}$	0	0	0	0
$\omega_{1^+}^{\#2}{}^{\dagger\alpha\beta}$	$-\frac{t_1}{\sqrt{2}}$	0	0	0	0	0	0
$f_{1^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{ikt_1}{\sqrt{2}}$	0	0	0	0	0	0
$\omega_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	$-\frac{t_1}{2}$	$\frac{t_1}{\sqrt{2}}$	0	$-ikt_1$
$\omega_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	$\frac{t_1}{\sqrt{2}}$	0	0	0
$f_{1^-}^{\#1}{}^{\dagger\alpha}$	0	0	0	0	0	0	0
$f_{1^-}^{\#2}{}^{\dagger\alpha}$	0	0	0	ikt_1	0	0	0

	$\omega_{2^+}^{\#1}{}^{\alpha\beta}$	$f_{2^+}^{\#1}{}^{\alpha\beta}$	$\omega_{2^-}^{\#1}{}^{\alpha\beta\chi}$
$\omega_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{t_1}{2}$	$-\frac{ikt_1}{\sqrt{2}}$	0
$f_{2^+}^{\#1}{}^{\dagger\alpha\beta}$	$\frac{ikt_1}{\sqrt{2}}$	$k^2 t_1$	0
$\omega_{2^-}^{\#1}{}^{\dagger\alpha\beta\chi}$	0	0	$k^2 r_1+\frac{t_1}{2}$

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

	$\sigma_{0^+}^{\#1}$	$\tau_{0^+}^{\#1}$	$\tau_{0^+}^{\#2}$	$\sigma_{0^-}^{\#1}$
$\sigma_{0^+}^{\#1}{}^{\dagger}$	$-\frac{1}{(1+2k^2)^2 t_1}$	$\frac{i\sqrt{2}\,k}{(1+2k^2)^2 t_1}$	0	0
$\tau_{0^+}^{\#1}{}^{\dagger}$	$-\frac{i\sqrt{2}\,k}{(1+2k^2)^2 t_1}$	$-\frac{2k^2}{(1+2k^2)^2 t_1}$	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:	$-\frac{t_1}{2r_1}>0$
Spin:	2
Parity:	Odd

(No massless particles)

$r_1<0\ \&\&\ t_1>0$