$\tau_{1}^{\#2}{}_{\alpha}$	0	0	0	$\frac{2ik}{t_1 + 2k^2t_1}$	$\frac{i\sqrt{2} k(2k^2 r_1 + t_1)}{(t_1 + 2k^2 t_1)^2}$	0	$\frac{2k^2(2k^2r_1+t_1)}{(t_1+2k^2t_1)^2}$
$t_{1}^{\#1}$	0	0	0	0	0	0	0
$\sigma_{1}^{\#2}$	0	0	0	$\frac{\sqrt{2}}{t_1 + 2k^2t_1}$	$\frac{2k^2r_1+t_1}{(t_1+2k^2t_1)^2}$	0	$-\frac{i\sqrt{2}k(2k^2r_1+t_1)}{(t_1+2k^2t_1)^2}$
$\sigma_{1^{\text{-}}\alpha}^{\#1}$	0	0	0	0	$\frac{\sqrt{2}}{t_1 + 2k^2t_1}$	0	$-\frac{2ik}{t_1+2k^2t_1}$
$\tau_1^{\#1}{}_+\alpha\beta$	$-\frac{6i\sqrt{2}k}{(3+2k^2)^2t_1}$	$\frac{12ik}{(3+2k^2)^2t_1}$	$\frac{12k^2}{(3+2k^2)^2t_1}$	0	0	0	0
$\sigma_{1}^{\#2}{}_{lphaeta}$	$-\frac{6\sqrt{2}}{(3+2k^2)^2t_1}$	$\frac{12}{(3+2k^2)^2t_1}$	$-\frac{12ik}{(3+2k^2)^2t_1}$	0	0	0	0
$\sigma_{1}^{\#1}{}_{\alpha\beta}$	$\frac{6}{(3+2k^2)^2t_1}$	$-\frac{6\sqrt{2}}{(3+2k^2)^2t_1}$	$\frac{6i\sqrt{2}k}{(3+2k^2)^2t_1}$	0	0	0	0
	$\sigma_{1}^{\#1} + \alpha \beta$	$\sigma_{1}^{\#2} + \alpha^{\beta}$	$t_1^{\#1} + \alpha \beta$	$\sigma_{1}^{\#1} +^{\alpha}$	$\sigma_{1}^{\#2} +^{\alpha}$	$\tau_{1}^{\#1} +^{\alpha}$	$\tau_1^{\#2} + ^{\alpha}$

	$\omega_0^{\sharp 1}$	$f_{0}^{#1}$	$f_{0^{+}}^{#2}$	$\omega_{0}^{#1}$
$\omega_{0}^{\sharp 1}$ †	-t ₁	$i \sqrt{2} kt_1$	0	0
$f_{0}^{\#1}\dagger$	$-i \sqrt{2} kt_1$	$-2 k^2 t_1$	0	0
$f_{0}^{#2}$ †	0	0	0	0
$\omega_0^{\#1}$ †	0	0	0	0

	$\omega_{2^{+}\alpha\beta}^{\#1}$	$f_{2}^{\#1}{}_{\alpha\beta}$	$\omega_{2^{-}lphaeta\chi}^{\#1}$
$\omega_{2}^{\#1} \dagger^{\alpha\beta}$	<u>t</u> 1 2	$-\frac{ikt_1}{\sqrt{2}}$	0
$f_{2+}^{\#1}\dagger^{\alpha\beta}$	$\frac{i k t_1}{\sqrt{2}}$	$k^2 t_1$	0
$\omega_2^{\sharp 1} \dagger^{lphaeta\chi}$	0	0	$k^2 r_1 + \frac{t_1}{2}$

:	#	1	I	1	3	3	Υ	3	2	20
Source constraints	SO(3) irreps	$\sigma_{0}^{\#1} == 0$	$\tau_{0+}^{#2} == 0$	$\tau_{0+}^{\#1} - 2 i k \sigma_{0+}^{\#1} == 0$	$t_1^{\#2}{}^{\alpha} + 2ik \sigma_1^{\#2}{}^{\alpha} = 0$	$\tau_{1}^{\#1}{}^{\alpha} == 0$	$\tau_{1}^{\#1}\alpha\beta - 2ik\sigma_{1}^{\#1}\alpha\beta == 0$	$2 \sigma_{1+}^{\#1} \alpha \beta + \sigma_{1+}^{\#2} \alpha \beta == 0$	$t_{2+}^{\#1}\alpha\beta - 2ik\sigma_{2+}^{\#1}\alpha\beta == 0\Big 5$	Total #:

0 0

 $\omega_{1}^{#2} + \alpha$ $f_{1}^{#1} + \alpha$ $f_{1}^{#2} + \alpha$

 $\frac{t_1}{\sqrt{2}}$

 $-ikt_1$

 $i k t_1$

 $\frac{t_1}{\sqrt{2}}$

 $-k^2 r_1 - \frac{t_1}{2}$

 $\omega_{1^{\bar{-}}}^{\#1} \, \dagger^{\alpha}$

	$\sigma_{2^{+}lphaeta}^{\!$	$ au_2^{\#1}{}_{lphaeta}$	$\sigma_{2}^{\sharp 1}{}_{\alpha\beta\chi}$
$\sigma_{2}^{\#1}\dagger^{lphaeta}$	$\frac{2}{(1+2k^2)^2t_1}$	$-\frac{2i\sqrt{2}k}{(1+2k^2)^2t_1}$	0
$ au_2^{\#1} \dagger^{lphaeta}$	$\frac{2i\sqrt{2}k}{(1+2k^2)^2t_1}$	$\frac{4k^2}{(1+2k^2)^2t_1}$	0
$\sigma_{2}^{\#1} \dagger^{\alpha\beta\chi}$	0	0	$\frac{2}{2 k^2 r_1 + t_1}$
0 0			

Lagrangian density	$-t_1\; {\omega_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_$	$2 r_1 \partial_{i} \omega^{\kappa \lambda}_{ \beta} \partial^{i} \omega_{\lambda}^{ \alpha}_{ \alpha} - \frac{2}{3} r_1 \partial^{\beta} \omega^{\theta \alpha}_{ \alpha} \partial^{\theta} \omega_{\alpha\beta}^{ \kappa} - \frac{2}{3} r_1 \partial_{\theta} \omega_{\alpha\beta}^{ \kappa} \partial_{\kappa} \omega^{\alpha \beta \theta} +$	$\frac{2}{3}r_{1}\partial_{\theta}\omega_{\alpha\beta}^{}\partial_{\kappa}\omega^{\theta\alpha\beta} + 2r_{1}\partial_{\alpha}\omega_{\lambda}^{\alpha}_{\theta}\partial_{\kappa}\omega^{\theta\kappa\lambda} - 2r_{1}\partial_{\theta}\omega_{\lambda}^{\alpha}_{\partial_{\kappa}}\omega^{\theta\kappa\lambda} +$	$2r_1\partial_{\alpha}\omega_{\lambda}^{\alpha}\partial_{\kappa}\omega^{\kappa\lambda\theta}$ $-4r_1\partial_{\theta}\omega_{\lambda}^{\alpha}\partial_{\kappa}\omega^{\kappa\lambda\theta}$ $-\frac{1}{3}t_1\partial^{\alpha}f_{\theta\kappa}\partial^{\kappa}f_{\alpha}^{\theta}$ $-$	$rac{2}{3}t_{1}\partial^{lpha}f_{\kappa heta}\partial^{\kappa}f_{a}^{ heta-rac{1}{3}}t_{1}\partial^{lpha}f^{\lambda}_{}\partial^{\kappa}f_{\lambda}+t_{1}\;\omega_{\kappalpha}^{lpha}\partial^{\kappa}f'_{\prime}+$	$t_1\;\omega_{\kappa\lambda}^{\;\;\lambda}\;\partial^{\kappa}f'_{\;\;\prime}+2t_1\partial^{lpha}f_{\;\kappalpha}\;\partial^{\kappa}f'_{\;\;\prime}-t_1\partial_{\kappa}f^{\;\lambda}_{\;\;\;\lambda}\partial^{\kappa}f'_{\;\;\prime}+rac{1}{3}t_1\;\omega_{_{/} heta\kappa}\;\partial^{\kappa}f^{' heta}+$	$rac{4}{3} t_1 \; \omega_{_{IK} heta} \; \partial^{\kappa} f^{' heta} - rac{1}{3} t_1 \; \omega_{ heta_{!K}} \; \partial^{\kappa} f^{' heta} + rac{2}{3} t_1 \; \omega_{ heta_{K'}} \; \partial^{\kappa} f^{' heta} -$	$t_1\; {\omega_{_{_{}}}}^{lpha}\; \partial^{\kappa} {f^{_{_{}}}}^{\prime} {}_{_{_{}}}^{-} t_1\; {\omega_{_{_{}}}}^{\lambda}\; \partial^{\kappa} {f^{_{_{}}}}^{\prime} + rac{1}{3} t_1 \partial^{lpha} {f^{\lambda}}^{\lambda}\; \partial^{\kappa} {f_{_{_{}}}}_{\lambdalpha} +$	$rac{1}{3}t_1\partial_\kappa f_{\beta}^{\lambda}\partial^\kappa f_{\lambda}^{\theta} + rac{2}{3}t_1\partial_\kappa f^{\lambda}_{\theta}\partial^\kappa f_{\lambda}^{\theta} - t_1\partial^\alpha f^{\lambda}_{\alpha}\partial^\kappa f_{\lambda\kappa} +$	$rac{2}{3}r_1\partial_\kappa\omega^{lphaeta heta}\partial^\kappa\omega_{lphaeta heta}^{-}rac{2}{3}r_1\partial_\kappa\omega^{ hetalphaeta}\partial^\kappa\omega_{lphaeta heta}^{+}rac{2}{3}r_1\partial^eta\omega_{lpha}^{lpha\lambda}\partial_\lambda\omega_{lphaeta}^{\prime}^{\prime}$	$\frac{8}{3}r_1\partial^{eta}\omega_{\lambda}^{\ \lambdalpha}\partial_{\lambda}\omega_{lphaeta}^{\ \ \ \prime}$ - $2r_1\partial_{lpha}\omega_{\lambda}^{\ \ lpha}\partial^{\lambda}\omega^{eta\kappa}_{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Added source term: $\left f^{lphaeta} \; \iota_{lphaeta} + \omega^{lphaeta\chi} \; \sigma_{lphaeta\chi} ight $
<i>7</i> 1 <	Uni:	(N	o ma	ssle	ss pa	rticl	es)					

$\alpha \beta \chi$	$\omega_{1^{-}}^{\#2}$	0	0	O
$\alpha\beta$, ∞	$\omega_{1^{-}}^{\#1}{}_{\alpha}$	0	0	C
$\alpha \beta$	$f_{1}^{\#1}_{\alpha\beta}$	$-\frac{ikt_1}{3\sqrt{2}}$	<i>ikt</i> 13	$k^2 t_1$
<u></u>	$\omega_{1}^{\#1}$ $\omega_{1}^{\#2}$ $\omega_{1}^{\#2}$ $\beta_{1}^{\#1}$	$\frac{t_1}{3\sqrt{2}}$	$\frac{\epsilon}{\Gamma_2}$	$-\frac{1}{l} lkt_1$
5	$\omega_{1}^{\#1}{}_{\alpha\beta}$	$\frac{9}{\overline{1}_{7}}$	$-\frac{t_1}{3\sqrt{2}}$	īktl
	·	$\omega_{1}^{\#1} +^{\alpha\beta}$	$\omega_{1}^{\#2} + \alpha^{\beta}$	$f^{#}_{1} + \alpha \beta$ $\frac{i k t_{1}}{1}$

·				
$\sigma_{0^{\text{-}}}^{\#1}$	0	0	0	0
$\tau_{0}^{\#2}$	0	0	0	0
$\tau_0^{\#1}$	$\frac{i\sqrt{2}k}{(1+2k^2)^2t_1}$	$-\frac{2k^2}{(1+2k^2)^2t_1}$	0	0
$\sigma_{0}^{\#1}$	$-\frac{1}{(1+2k^2)^2t_1}$	$-\frac{i\sqrt{2}k}{(1+2k^2)^2t_1}$	0	0
	$\sigma_{0}^{\#1}$ †	$\tau_{0}^{\#1}$ †	$\tau_{0}^{\#2}$ †	$\sigma_{0}^{\#1}\dagger$

	Massive partici	ie
? $J^P = 2^{-/}$	Pole residue:	$-\frac{1}{r_1} > 0$
?	Polarisations:	5
k^{μ}	Square mass:	$-\frac{t_1}{2r_1} > 0$
?	Spin:	2
·	Parity:	Odd

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