					1 -		
$\tau_{1}^{\#2}{}_{\alpha}$	0	0	0	$-\frac{i}{k(1+2k^2)(r_1+r_5)}$	$\frac{i(6k^2(r_1+r_5)+t_1)}{\sqrt{2}k(1+2k^2)^2(r_1+r_5)t_1}$	0	$\frac{6k^2(r_1+r_5)+t_1}{(1+2k^2)^2(r_1+r_5)t_1}$
$\tau_{1}^{\#1}{}_{\alpha}$	0	0	0	0	0	0	0
$\sigma_{1^-}^{\#2}{}_{\alpha}$	0	0	0	$\frac{1}{\sqrt{2} (k^2 + 2 k^4) (r_1 + r_5)}$	$\frac{6k^2(r_1+r_5)+t_1}{2(k+2k^3)^2(r_1+r_5)t_1}$	0	$-\frac{i(6k^2(r_1+r_5)+t_1)}{\sqrt{2}k(1+2k^2)^2(r_1+r_5)t_1}$
$\sigma_{1^-}^{\#1}{}_{\alpha}$	0	0	0	$\frac{1}{k^2 \left(r_1 + r_5 \right)}$	$-\frac{1}{\sqrt{2}\;(k^2+2k^4)\;(r_1+r_5)}$	0	$\frac{i}{k(1+2k^2)(r_1+r_5)}$
$\tau_{1}^{\#1}$	$-\frac{\bar{s}\sqrt{2}k}{t_1+k^2t_1}$	$\frac{-2ik^3(2r_1+r_5)+ikt_1}{(1+k^2)^2t_1^2}$	$\frac{-2k^4(2r_1+r_5)+k^2t_1}{(1+k^2)^2t_1^2}$	0	0	0	0
$\sigma_{1}^{\#2}{}_{lphaeta}$		$\frac{-2 k^2 (2 r_1 + r_5) + t_1}{(1 + k^2)^2 t_1^2}$	$\frac{i(2k^3(2r_1+r_5)-kt_1)}{(1+k^2)^2t_1^2}$	0	0	0	0
$\sigma_1^{\#1}{}_+\alpha\beta$	0	$-\frac{\sqrt{2}}{t_1+k^2t_1}$	$\tau_1^{\#1} + \alpha \beta \left(\frac{i \sqrt{2} k}{t_1 + k^2 t_1} \right)$	0	0	0	0
	$\sigma_{1}^{\#1} + \alpha \beta$	$\sigma_{1}^{#2} + \alpha^{\beta}$	$\tau_1^{\#1} \dagger^{\alpha \beta}$	$\sigma_{1}^{\#1} +^{lpha}$	$\sigma_{1}^{\#2} +^{lpha}$	$\tau_{1}^{\#1} + ^{lpha}$	$\tau_1^{\#2} + ^{\alpha}$

Source constraints	
SO(3) irreps	#
$\sigma_{0+}^{\#1} == 0$	1
$\tau_{0^{+}}^{\#1} == 0$	1
$\tau_{0+}^{\#2} == 0$	1
$\tau_{1}^{\#2\alpha} + 2 i k \sigma_{1}^{\#2\alpha} == 0$	3
$\tau_{1}^{\#1}{}^{\alpha} == 0$	3
$\tau_{1+}^{\#1\alpha\beta} + i k \sigma_{1+}^{\#2\alpha\beta} == 0$	3
$\tau_{2+}^{\#1\alpha\beta} - 2ik\sigma_{2+}^{\#1\alpha\beta} == 0$	5
Total #:	17

Lagrangian density

 $\frac{2}{3}r_{1}\partial_{\theta}\omega_{\alpha\beta}^{}\partial_{\kappa}\omega^{\alpha\beta\theta} + \frac{2}{3}r_{1}\partial_{\theta}\omega_{\alpha\beta}^{}\partial_{\kappa}\omega^{\theta\alpha\beta} - r_{5}\partial_{\alpha}\omega_{\lambda}^{\alpha}\partial_{\kappa}\omega^{\theta\kappa\lambda} +$

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

		+',+	$f_{\lambda\alpha}$ +					.					
		27	*Ox		- ' θ;			$\sigma_{0^{-}}^{\# 1}$	0	0	0	1 7	Tم
кув		$f_1 \partial_{\kappa} f$	$\partial^{\alpha} f^{\lambda}$		$\partial_{\lambda}\omega_{_{lpha}}$	λ ×		$\sigma_{0}^{\#1} \ \tau_{0}^{\#1} \ \tau_{0}^{\#2} \ \sigma_{0}^{\#1}$	0	0 0 0	0	0	
; (1)	, t	, - 1 1	$\frac{1}{2}t_1$	+ +	$\omega_{\alpha}^{\alpha\lambda}$	$\partial^{\lambda}\omega^{\epsilon}$		$\tau_0^{\#1}$	0	0	0	0	
α	$a_{\lambda} a_{\alpha}$	$f_{\lambda} g^{\kappa} f^{\prime}$	f' _* +	$_{\chi}\partial^{K}f_{,}$	$_{1}\partial ^{eta}$	$ \frac{\alpha}{\lambda} \alpha $		$\sigma_{0}^{\#1}$	0	0	0	0	
6 7 7 + 6	$\frac{1}{2}t_1\partial^{\alpha}f^{\lambda}$	$\frac{2}{3} t_1 \partial^{\alpha} f_{\kappa c}$	$t_1 \omega_{\prime \lambda}^{\ \ \lambda} \partial^{\kappa}$	$\frac{1}{3}t_1\partial^{\alpha}f^{\lambda}$	$\omega_{\alpha\beta\theta} + \frac{2}{3}$	$\frac{\theta \kappa}{\kappa}$ - $r_5 \partial_{\theta} c$	$\sigma^{\alpha \beta \chi} \sigma_{\alpha \beta \chi}$		$\sigma_{0}^{\#1}$ † 0 0 0 0	$\tau_0^{\#1} +$	$\tau_{0}^{#2} + 0 0 0 0$	$\sigma_{0}^{#1}+ 0 0 0 -\frac{1}{t_1}$)
$\alpha = \alpha \times \kappa \lambda \ell$	$\frac{1}{2}t_1\partial^{\alpha}f_{\theta k}\partial^{\kappa}f_{\alpha}^{} - \frac{1}{2}t_1\partial^{\alpha}f_{\kappa\theta}\partial^{\kappa}f_{\alpha}^{} - \frac{1}{2}t_1\partial^{\alpha}f^{\lambda}_{}\partial^{\kappa}f_{\alpha\lambda}^{} +$	$\frac{1}{3}t_{1}\ \omega_{\kappa\alpha}^{\ \alpha}\ \partial^{\kappa}f'_{\ \prime} + \frac{1}{3}t_{1}\ \omega_{\kappa\lambda}^{\ \lambda}\ \partial^{\kappa}f'_{\ \prime} + \frac{2}{3}t_{1}\ \partial^{\alpha}f_{\ \kappa\alpha}\partial^{\kappa}f'_{\ \prime} - \frac{1}{3}t_{1}\ \partial_{\kappa}f^{\lambda}_{\ \lambda}\partial^{\kappa}f'_{\ \prime} +$	$2t_1\;\omega_{ik\theta}\;\partial^k f^{i\theta}-\tfrac{1}{3}t_1\;\omega_{i\alpha}^{}\;\partial^k f^{\prime}_{}-\tfrac{1}{3}t_1\;\omega_{i\lambda}^{\lambda}\;\partial^k f^{\prime}_{}+\tfrac{1}{2}t_1\;\partial^\alpha f^{\lambda}_{}\;\partial^k f_{\lambda\alpha}+$	$\frac{1}{2}t_1\partial_\kappa f_{\beta}^{\lambda}\partial^\kappa f_{\beta}^{\beta} + \frac{1}{2}t_1\partial_\kappa f^{\beta}\partial^\kappa f_{\beta}^{\beta} - \frac{1}{3}t_1\partial^\alpha f^{\beta}\partial^\kappa f_{\kappa}^{\beta} +$	$\frac{2}{3} r_1 \partial_{\kappa} \omega^{\alpha\beta\theta} \partial^{\kappa} \omega_{\alpha\beta\theta} - \frac{2}{3} r_1 \partial_{\kappa} \omega^{\theta\alpha\beta} \partial^{\kappa} \omega_{\alpha\beta\theta} + \frac{2}{3} r_1 \partial^{\beta} \omega_{\alpha}^{\ \alpha\lambda} \partial_{\lambda} \omega_{\alpha\beta}^{\ \prime} -$	$\frac{8}{3}r_{1}\partial^{\beta}\omega_{\lambda}^{\lambda\alpha}\partial_{\lambda}\omega_{\alpha\beta}^{\prime} + r_{5}\partial_{\alpha}\omega_{\lambda}^{\alpha}\partial^{\lambda}\omega^{\theta\kappa}_{\kappa} - r_{5}\partial_{\theta}\omega_{\lambda}^{\alpha}\partial^{\lambda}\omega^{\theta\kappa}_{\kappa}$	Added source term: $f^{lphaeta} \; \iota_{lphaeta} + \omega^{lphaeta\chi} \; \sigma_{lphaeta\chi}$	$\omega_{2}^{\#1}$ $\beta_{2}^{\#1}$ $\beta_{2}^{\#1}$ $\alpha_{2}^{\#1}$ α_{3}	0		0	$k^2 r_1 + \frac{t_1}{2}$	
~ , «	$\frac{75 \circ \alpha}{2}$	$+\frac{1}{3}t_1 a$	$\frac{1}{3}t_1\omega,$	$+\frac{1}{2}t_{1}\hat{c}$	$\alpha\beta\theta^{-\frac{2}{3}}r$	$^{\prime}_{\chi \beta}^{\prime} + r_5^{\prime}$	term:	$f_{2}^{\#1}$	$-\frac{ikt_1}{c}$	75	$k^{2}t_{1}$	0	
θ_{K}	$_{lpha}^{\alpha}{}_{eta}^{\kappa}\omega$ $_{eta}^{lpha}{}_{eta}^{eta}f_{lpha}^{}$	$\alpha \partial^{\kappa} f'$	$^{9}\partial^{\kappa}f^{1\theta}$ -	$^{\lambda}\partial^{\kappa}f_{\lambda}^{\theta}$	$^{lphaeta heta}\partial^{\kappa}\omega$	$^{,\lambdalpha}\partial_{\lambda}\omega_{c}$	source	$\omega_2^{\#1}_{+}$	L ²	2 ikt1	$\sqrt{2}$	0	
, ה י	$\frac{1}{2}t_1\partial^{\alpha}f_{\epsilon}$	$\frac{1}{3} t_1 \ \omega_{\kappa \alpha}$	$2t_1 \omega_{IK}$	$rac{1}{2}t_1\partial_\kappa f_{\epsilon}$	$\frac{2}{3} r_1 \partial_{\kappa} \omega$	$\frac{8}{3} r_1 \partial^{\beta} \omega$	Added s		$\omega_{2+}^{\#1} + \alpha \beta $ $\frac{t_1}{2}$ $-\frac{ikt_1}{c}$ 0	ζ#1 . αβ	12+T====================================	$\omega_2^{\#1} + \alpha \beta \chi \qquad 0 \qquad 0 \qquad k^2 r_1 + \frac{t_1}{2}$	

_				
$\sigma_{0^{-}}^{\#1}$	0	0	0	$-\frac{1}{t_1}$
$\tau_{0}^{\#2}$	0	0	0	0
$\tau_0^{\#1}$	0	0	0	0
$\sigma_{0}^{\#1}$ $\tau_{0}^{\#1}$	0	0	0	0
	$\sigma_{0}^{\#1}$	$\tau_0^{\#1}$	$\tau_0^{\#2}$	$\sigma_{0}^{\#1}$
$\omega_{2}^{\#1}_{\alpha\beta\chi}$	0	,	0	$k^2 r_1 + \frac{t_1}{2}$
$\omega_{2}^{\#1}{}_{lphaeta}f_{2}^{\#1}{}_{lphaeta}$	$-\frac{ikt_1}{c}$	7,7	$k^{2}t_{1}$	0
$\omega_{2}^{\#1}{}_{lphaeta}$	$\frac{t_1}{\hat{\cdot}}$	2 <i>i</i> ktı	$\sqrt{2}$	0
	$+^{\alpha\beta}$	go.	2	$\alpha\beta\chi$

					$f_{1}^{\#1}$	i b + 1	$-\frac{\pi \wedge \epsilon_{\perp}}{\sqrt{2}}$	0	0	
0	0	0	- 1		$\omega_{1}^{\#2}{}_{\alpha\beta}$	1,1	$-\frac{\sqrt{2}}{\sqrt{2}}$	0	0	
0	0	0	0			+1	2 2			
0	0	0	0		$\alpha\beta$		r ₅)-	llai	-1.	
0	0	0	0		$\omega_{1}^{\#1}_{\alpha\beta}$		$k^2 (2r_1 + r_5) - \frac{c_1}{2}$	$-\frac{t_1}{\sqrt{2}}$	ikt ₁	77
$\sigma_{0}^{\#1}$ \dagger	$\tau_{0}^{\#1}$ †	$\tau_{0}^{\#2}$ †	$\sigma_{0}^{\#1} +$							
P	1	1	Ь			0	+ _{ab}	$\dagger^{\alpha\beta}$	$+^{\alpha\beta}$	
			다 2			5	$\varepsilon_{1^{+}}^{*}$	$\omega_1^{\#2}$	$f_{1}^{#}$	-
0	(0	$a_1 + \frac{t_1}{2}$				ω_{1}^{*}	$\omega_1^{\#2}$	f#1	-1
0	(0	$k^2 r_1 + \frac{t_1}{2}$		#1 					-1
					`	O	$\omega_1^{\#}$	$0 \qquad \omega_{1}^{\#2}$	$-t_1$ $f_{1+}^{\#1}$	4
$-\frac{ikt_1}{c}$		$k^{2}t_{1}$ 0	$0 k^2 r_1 + \frac{t_1}{2}$		N					1
	۲۸ .			7	f f #2	0	0	0	-t ₁	4

 $\omega_{0}^{#1} + f_{0}^{#1} + f_{0}^{#1} + f_{0}^{#2} + f_{0}^{#2} + \omega_{0}^{#1} + \omega_{$

 $f_{1^-}^{\#2}\alpha$

 $f_{1}^{\#1}$

 $\omega_{1}^{\#2}{}_{lpha}$

 $\omega_{1^{^{-}}\alpha}^{\#1}$

 $\frac{1}{3}$ \overline{l} $\sqrt{2}$ kt_1

 $\frac{t_1}{3\sqrt{2}}$

 $\omega_1^{\#2} \uparrow^\alpha$

*ikt*1 3

 $\frac{t_1}{3\sqrt{2}}$

 $k^2 \left(r_1 + r_5 \right) + \frac{t_1}{6}$

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

 $2k^2t_1$

 $\left|-\frac{1}{3}\,\overline{l}\,\sqrt{2}\,kt_1\right|$

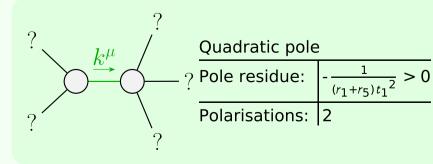
 $-\frac{1}{3}ikt_1$

 $f_1^{\#2} + \alpha$

 $f_{1}^{\#1} \dagger^{\alpha}$

	V
? ? ? ?-/	P
$J^P = 2$	2 P
\vec{k}^{μ}	S
?	S

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



Unitarity conditions $r_1 < 0 \&\& r_5 < -r_1 \&\& t_1 > 0$
