$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
0	0 0
0 0 0	

Lagrangian density
$-t_1 \omega_{\kappa \alpha}^{\ \ \alpha'} \omega_{\kappa \alpha}^{\ \ \kappa} - \frac{1}{3} t_1 \omega_{\kappa \lambda}^{\ \ \kappa \lambda} + \frac{1}{3} t_1 \omega_{\kappa \lambda}^{\ \ \prime} \omega_{\kappa \lambda}^{\ \ \prime} + f^{\alpha \beta} \tau_{\alpha \beta} + \omega^{\alpha \beta \chi} \sigma_{\alpha \beta \chi} + \omega^{\alpha \beta \chi} \sigma_{\alpha \gamma} + \omega^{\alpha \beta \chi} \sigma_{\alpha \beta \chi} + \omega^{\alpha \beta \chi} \sigma_{\alpha \beta \chi} + \omega^{\alpha \beta \chi} \sigma_{\alpha \beta \chi} + \omega^{\alpha \beta \chi} \sigma_{\alpha \gamma} + \omega^{\alpha \beta \chi} \sigma_{\alpha \gamma} + \omega^{\alpha \gamma \chi} $
$2r_1\partial_i\omega^{\kappa\lambda}_{\kappa}\partial^i\omega_{\alpha3}^{\alpha}-\frac{2}{3}r_1\partial^\beta\omega^{\theta\alpha}_{\alpha\beta}\partial_\theta\omega_{\alpha\beta}^{\kappa}-\frac{2}{3}r_1\partial_\theta\omega_{\alpha\beta}^{\kappa}\partial_\kappa\omega^{\alpha\beta\theta}+$
$\frac{2}{3} r_1 \partial_\theta \omega_{\alpha\beta}^{ \kappa} \partial_\kappa \omega^{\theta\alpha\beta} + 2 r_1 \partial_\alpha \omega_\lambda^{ \alpha} \partial_\kappa \omega^{\theta\kappa\lambda} - 2 r_1 \partial_\theta \omega_\lambda^{ \alpha} \partial_\kappa \omega^{\theta\kappa\lambda} +$
$2 r_1 \partial_{lpha} \omega_{\lambda}^{ \theta} \partial_{\kappa} \omega^{\kappa \lambda \theta} - 4 r_1 \partial_{\theta} \omega_{\lambda}^{ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} - \frac{1}{3} t_1 \partial^{lpha} f_{ heta \kappa} \partial^{\kappa} f_{ \theta} -$
$rac{2}{3}t_{1}\partial^{lpha}f_{\kappa heta}\partial^{\kappa}f_{lpha}^{\;\; heta}-rac{1}{3}t_{1}\partial^{lpha}f^{\lambda}_{\;\;\;}\partial^{\kappa}f_{lpha\lambda}+t_{1}\;\omega_{\kappalpha}^{\;\;\;lpha}\;\partial^{\kappa}f'_{\;\;\;}+t_{1}\;\omega_{\kappa\lambda}^{\;\;\;\lambda}\;\partial^{\kappa}f'_{\;\;\;}+$
$2t_1 \partial^{\alpha} f_{\kappa\alpha} \partial^{\kappa} f'_{\ \prime} - t_1 \partial_{\kappa} f^{\lambda}_{\ \lambda} \partial^{\kappa} f'_{\ \prime} + \frac{1}{3} t_1 \ \omega_{\prime\theta\kappa} \partial^{\kappa} f'^{\theta} + \frac{4}{3} t_1 \ \omega_{\prime\kappa\theta} \partial^{\kappa} f'^{\theta} -$
$rac{1}{3}t_1\;\omega_{ heta_{lk}}\partial^k f^{l heta} + rac{2}{3}t_1\;\omega_{ heta_{kl}}\;\partial^k f^{l heta} - t_1\;\omega_{llpha}\;\partial^k f^{l}_{\;\;k} - t_1\;\omega_{l\lambda}^{\;\;\lambda}\;\partial^k f^{l}_{\;\;k} +$
$\frac{1}{3}t_1\partial^{\alpha}f^{\lambda}_{\kappa}\partial^{\kappa}f_{\lambda\alpha} + \frac{1}{3}t_1\partial_{\kappa}f_{\beta}^{\lambda}\partial^{\kappa}f_{\beta} + \frac{2}{3}t_1\partial_{\kappa}f^{\lambda}_{\beta}\partial^{\kappa}f_{\beta} - t_1\partial^{\alpha}f^{\lambda}_{\alpha}\partial^{\kappa}f_{\lambda\kappa} +$
$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}^{} \partial_\lambda \omega_{lphaeta}^{\prime} -$
$\frac{8}{2} r_1 \partial^{\beta} \omega_{\lambda}^{\lambda \alpha} \partial_{\lambda} \omega_{\alpha}^{\ \ \prime} - 2 r_1 \partial_{\alpha} \omega_{\lambda}^{\ \ \alpha} \partial^{\lambda} \omega^{\theta \kappa}_{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $

	#	1	1	П	٣	~	, r	n m	2)
Source constraints	SO(3) irreps	$\sigma_{0^-}^{#1} == 0$	$\tau_{0+}^{\#2} == 0$	$\tau_{0+}^{\#1} - 2 \bar{l} k \sigma_{0+}^{\#1} == 0$	$\tau_{1}^{\#2}{}^{\alpha} + 2ik \sigma_{1}^{\#2}{}^{\alpha} == 0$	$\tau_{m1}^{\#1}\alpha == 0$	$r^{\#1}\alpha\beta$ - 2 if $r^{\#1}\alpha\beta$ 0 3	$2 \sigma_{++}^{\#1} \alpha \beta + \sigma_{++}^{\#2} \alpha \beta == 0$	$I_{\mu}^{*1}\alpha\beta - 2ik \ O_{\mu}^{*1}\alpha\beta = 0 \ 5$,2+ = = c 2+ = c
$f_{1}^{#2}$		0	0	0		$I K t_1$	0	0	0	
$f_{1^-}^{\#1}$		0	0	0)	0	0	0	
$\omega_{1^{-}}^{\#2} \ f_{1^{-}}^{\#1} \ _{\sigma} \ f_{1^{-}}^{\#2}$		0	0	0	t_1	$\sqrt{2}$	0	0	0	
$\omega_{1^-}^{\#1}{}_{\alpha}$		0	0	0	1,2 , t ₁	$-K / 1 - \frac{-}{2}$	$\frac{t_1}{\sqrt{2}}$	0	$-ikt_1$	
$f_{1}^{\#1}$	īkt,	$-\frac{7\times21}{3\sqrt{2}}$	<u>i kt1</u> 3	آخا	n ()	0	0	0	
$\alpha_{\beta}^{\#2} \omega_{1}^{\#2} + \alpha_{\beta}^{\#1}$	1, 1,	3 √2	1 <u>7</u> 3	$-\frac{1}{3}$ \bar{l} kt_1		>	0	0	0	
$\omega_1^{\#1}$	7	<u>7.</u> 9	$-\frac{t_1}{3\sqrt{2}}$	1 kt1	2 0)	0	0	0	
	77	$\omega_1^{*1} + \tau^{\mu\rho}$	$\omega_1^{#2} + \alpha \beta$	$f_1^{#1} + \alpha \beta$		$\omega_1^{\cdot\cdot}$ \top	$\omega_1^{\#2} +^{\alpha}$	$f_{1}^{#1} + \alpha$	$f_1^{\#2} + \alpha$	

$\omega_{0^{\text{-}}}^{\#1}$	0	0	0	0	
$f_{0}^{\#2}$	0	0	0	0	
$f_0^{\#1}$	$i\sqrt{2}~kt_1$	$-2 k^2 t_1$	0	0	
$\omega_{0}^{\#1}$	-t ₁	$-i \sqrt{2} kt_1$	0	0	
	$\omega_{0}^{\#1}\dagger$	$f_{0}^{\#1}$ †	$f_{0}^{#2} +$	$\omega_{0^{\text{-}}}^{\#1}\dagger$	

$\omega_{2}^{\#1}_{}^{}$	0	0	$k^2 r_1 + \frac{t_1}{2}$
$f_2^{\#1}$	$-\frac{ikt_1}{\sqrt{2}}$	$k^2 t_1$	0
$\omega_{2^+}^{\#1}\alpha_\beta \ f_{2^+}^{\#1}\alpha_\beta$	<u>£1</u> 2	$\frac{ikt_1}{\sqrt{2}}$	0
	$\omega_2^{\#1} + ^{lphaeta}$	$f_2^{#1} + ^{\alpha\beta}$	$\omega_{2}^{\#1} +^{lphaeta\chi}$

	$\sigma_{2^{+}lphaeta}^{\sharp1}$	$ au_2^{\#1}_{lphaeta}$	$\sigma_{2}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2}^{\#1} \dagger^{\alpha\beta}$	$\frac{2}{(1+2k^2)^2t_1}$	$-\frac{2i\sqrt{2}k}{(1+2k^2)^2t_1}$	0
$\tau_{2}^{\#1} \dagger^{\alpha\beta}$	$\frac{2 i \sqrt{2} k}{(1+2 k^2)^2 t_1}$	$\frac{4k^2}{(1+2k^2)^2t_1}$	0
$\sigma_2^{\#1} \dagger^{\alpha\beta\chi}$	0	0	$\frac{2}{2k^2r_1+t_1}$

_	$\sigma_0^{\#1}$	$ au_0^{\#1}$	$ au_{0}^{\#2}$	$\sigma_0^{\#1}$
$\sigma_{0}^{\#1}$ †	$-\frac{1}{(1+2k^2)^2t_1}$	$\frac{i \sqrt{2} k}{(1+2k^2)^2 t_1}$	0	0
$\tau_{0}^{\#1}$ †	$-\frac{i\sqrt{2} k}{(1+2k^2)^2 t_1}$	$-\frac{2k^2}{(1+2k^2)^2t_1}$	0	0
$\tau_{0^{+}}^{\#2}$ †	0	0	0	0
$\sigma_{0}^{\#1}$ †	0	0	0	0

	Massive partic	le
? /	Pole residue:	$-\frac{1}{r_1}$
$J^P = 2^-$	Polarisations:	5
	Square mass:	$-\frac{t_1}{2r_1}$
?	Spin:	2
	Parity:	Od

(No massless particles)