α				$\frac{\pi k}{\alpha_0 k^2}$	$\frac{\sqrt{2} k}{2 k^2)^2}$		$\frac{2}{2k^2)^2}$
$\tau_{1}^{\#2}{}_{\alpha}$	0	0	0	$-\frac{4ik}{\alpha_0+2\alpha_0k^2}$	$-\frac{2i\sqrt{2}k}{\alpha_0(1+2k^2)^2}$	0	$-\frac{4k^2}{\alpha_0(1+2k^2)^2}$
$\tau_{1^{-}}^{\#1}\alpha$	0	0	0	0	0	0	0
$\sigma_{1}^{\#2}$	0	0	0	$-\frac{2\sqrt{2}}{\alpha_0+2\alpha_0 k^2}$	$-\frac{2}{\alpha_0 (1+2 k^2)^2}$	0	$\frac{2i\sqrt{2}k}{\alpha_0(1+2k^2)^2}$
$\sigma_{1}^{\#1}{}_{\alpha}$	0	0	0	0	$-\frac{2\sqrt{2}}{\alpha_0+2\alpha_0k^2}$	0	$\frac{4 i k}{\alpha_0 + 2 \alpha_0 k^2}$
$\tau_1^{\#1}{}_+\alpha\beta$	$\frac{2i\sqrt{2}k}{\alpha_0 + \alpha_0k^2}$	$-\frac{2ik}{\alpha_0(1+k^2)^2}$	$-\frac{2k^2}{\alpha_0(1+k^2)^2}$	0	0	0	0
$\sigma_{1}^{\#2}{}_{\alpha\beta}$	$\frac{2\sqrt{2}}{\alpha_0 + \alpha_0 k^2}$	$-\frac{2}{\alpha_0 (1+k^2)^2}$	$\frac{2ik}{\alpha_0 (1+k^2)^2}$	0	0	0	0
$\sigma_{1}^{\#1}{}_{\alpha\beta}$	0	$\frac{2\sqrt{2}}{\alpha_0 + \alpha_0 k^2}$	$-\frac{2i\sqrt{2}k}{\alpha_0 + \alpha_0 k^2}$	0	0	0	0
	$r_1^{\#1} + \alpha \beta$	$\sigma_1^{\#2} + \alpha \beta$	$\tau_1^{\#1} + \alpha \beta$	$\sigma_{1}^{\#1} \dagger^{lpha}$	$\sigma_1^{\#2} +^{\alpha}$	$\tau_{1}^{\#1} +^{\alpha}$	$\tau_{1}^{\#2} +^{\alpha}$

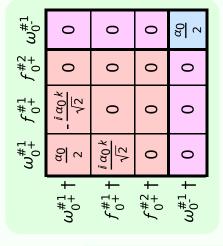
Lagrangian density

 $\frac{1}{2} \alpha_0 \omega_{\alpha\zeta\beta} \omega^{\alpha\beta\zeta} - \frac{1}{2} \alpha_0 \omega_{\alpha}^{\alpha\beta} \omega_{\beta\zeta}^{\zeta} + f^{\alpha\beta} \tau_{\alpha\beta} + \omega^{\alpha\beta\chi} \sigma_{\alpha\beta\chi}^{\zeta} - \alpha_0 f^{\alpha\beta} \partial_{\beta}\omega_{\alpha\zeta}^{\zeta} + \alpha_0 \partial_{\beta}\omega_{\alpha}^{\alpha\beta} + \alpha_0 f^{\alpha\beta} \partial_{\zeta}\omega_{\alpha\beta}^{\zeta} - \alpha_0 f^{\alpha}_{\alpha} \partial_{\zeta}\omega_{\beta}^{\beta\zeta}$

$f_{1^{ ext{-}}lpha}^{\#2}$	0	0	0	$-rac{1}{2}$ i $lpha_0$ k	0	0	0
$f_{1^{-}}^{\#1}{}_{\alpha}$	0	0	0	0	0	0	0
$\omega_{1^{^{-}}\alpha}^{\#2}$	0	0	0	$-\frac{\alpha_0}{2\sqrt{2}}$	0	0	0
$\omega_{1^{^{-}}\alpha}^{\#1}$	0	0	0	<u>α0</u> 4	$-\frac{\alpha_0}{2\sqrt{2}}$	0	$\frac{i\alpha_0 k}{2}$
$f_1^{\#1}{}_{\!$	$\frac{i \alpha_0 k}{2 \sqrt{2}}$	0	0	0	0	0	0
$\omega_1^{\#2}$	$\frac{\alpha_0}{2\sqrt{2}}$	0	0	0	0	0	0
$\omega_1^{\#1}{}_+\alpha\beta$	<u>α0</u>	$\frac{\alpha_0}{2\sqrt{2}}$	$-\frac{i\alpha_0 k}{2\sqrt{2}}$	0	0	0	0
	$+^{\alpha\beta}$	$+^{\alpha\beta}$	$\dagger^{\alpha \beta}$	$+^{\alpha}$	$+^{\alpha}$	$+^{\alpha}$	$+^{\alpha}$
	$\omega_1^{\#1}$ †	$\omega_1^{\#2}$ 1	$f_1^{\#1}$	$\omega_{1^{ ext{-}}}^{\#1}$	$\omega_{1}^{\#2}$ †	$f_{1}^{\#1}$	$f_{1}^{#2}$
		_					

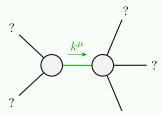
	$\sigma_{0}^{\#1}$	$ au_{0}^{\#1}$	$ au_{0}^{\#2}$	$\sigma_0^{\#1}$
$\sigma_{0}^{\#1}$ †	0	$-\frac{i\sqrt{2}}{\alpha_0 k}$	0	0
$\tau_{0}^{\#1}$ †	$\frac{i\sqrt{2}}{\alpha_0 k}$	$-\frac{1}{\alpha_0 k^2}$	0	0
$\tau_{0}^{\#2}$ †	0	0	0	0
$\sigma_{0}^{\sharp 1}$ †	0	0	0	$\frac{2}{\alpha_0}$

	$\sigma_{2^{+}\alpha\beta}^{\#1}$	$ au_2^{\#1}_{lphaeta}$	$\sigma_{2}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2}^{\#1}\dagger^{lphaeta}$	0	$\frac{2i\sqrt{2}}{\alpha_0k}$	0
$ au_2^{\#1} \dagger^{lphaeta}$	$-\frac{2i\sqrt{2}}{\alpha_0 k}$	$\frac{2}{\alpha_0 k^2}$	0
$\sigma_{2}^{#1}\dagger^{lphaeta\chi}$	0	0	$-\frac{4}{\alpha_0}$



	$\omega_{2}^{\#1}{}_{\alpha\beta}$	$f_{2}^{\#1}{}_{lphaeta}$	$\omega_{2}^{\#1}{}_{\alpha\beta\chi}$
$\omega_{\scriptscriptstyle 2}^{\scriptscriptstyle \#1}\dagger^{lphaeta}$	$-\frac{\alpha_0}{4}$	$\frac{i \alpha_0 k}{2 \sqrt{2}}$	0
$f_{2+}^{\#1}\dagger^{\alpha\beta}$	$-\frac{i\alpha_0 k}{2\sqrt{2}}$	0	0
$\omega_{2}^{#1}\dagger^{lphaeta\chi}$	0	0	$-\frac{\alpha_0}{4}$

	#	1	3	3	3	10
Source constraints	SO(3) irreps	$ \tau_{0+}^{\#2} == 0 $	$\tau_{1}^{\#2}{}^{\alpha} + 2 i k \sigma_{1}^{\#2}{}^{\alpha} == 0$	$\tau_{1}^{\#1}{}^{\alpha} == 0$	$\tau_{1+}^{\#1}\alpha\beta + ik \sigma_{1+}^{\#2}\alpha\beta == 0$	Total #:



Quadratic pole

Pole residue: $\frac{1}{\alpha_0} > 0$

Polarisations: 2

(No massive particles)