$ au_1^{\#2}$	0	0	0	$-\frac{4ik}{\alpha_0+2\alpha_0k^2}$	$-\frac{2i\sqrt{2}k}{\alpha_0(1+2k^2)^2}$	0	$-\frac{4k^2}{\alpha_0(1+2k^2)^2}$
$\tau_{1^{-}\alpha}^{\#1}$	0	0	0	0	0	0	0
$\sigma_{1}^{\#2}{}_{lpha}$	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	$-\frac{2\sqrt{2}}{\alpha_0+2\alpha_0 k^2}$	0	$\frac{4ik}{\alpha_0 + 2\alpha_0k^2}$
${\mathfrak r}_1^{\#1}{}_{\alpha\beta}$	$\frac{2i\sqrt{2}k}{\alpha_0 + \alpha_0k^2}$	$-\frac{2ik}{\alpha_0(1+k^2)^2}$	$-\frac{2k^2}{\alpha_0(1+k^2)^2}$	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	$\frac{2\sqrt{2}}{\alpha_0 + \alpha_0 k^2}$	$-\frac{2i\sqrt{2}k}{\alpha_0 + \alpha_0k^2}$	0	0	0	0
	$+^{\alpha\beta}$	$\alpha\beta$	$\alpha\beta$	$\dagger^{\alpha}$	$+^{\alpha}$	$^{\dagger}$	$+^{\alpha}$

## Lagrangian density

 $-\frac{1}{2}\alpha_{0}\omega_{\alpha\zeta\beta}\omega^{\alpha\beta\zeta} - \frac{1}{2}\alpha_{0}\omega^{\alpha\beta}_{\alpha}\omega_{\beta}^{\zeta} + f^{\alpha\beta}\tau_{\alpha\beta} + \omega^{\alpha\beta\chi}\sigma_{\alpha\beta\chi} - \alpha_{0}f^{\alpha\beta}\partial_{\beta}\omega_{\alpha}^{\zeta} + \alpha_{0}\partial_{\beta}\omega^{\alpha\beta}_{\alpha} + \alpha_{0}f^{\alpha\beta}\partial_{\zeta}\omega_{\alpha}^{\zeta} - \alpha_{0}f^{\alpha}_{\alpha}\partial_{\zeta}\omega^{\beta\zeta}_{\beta}$ 

ı							
$f_{1^{ ext{-}}lpha}^{\#2}$	0	0	0	$-\frac{1}{2}\bar{l}\alpha_0k$	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	$\frac{i}{\alpha_0} \frac{k}{k}$
$f_1^{\#1}{}_{\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	$\frac{i\alpha_0 k}{2\sqrt{2}}$	0	0	0	0	0	0
$\omega_1^{\#2}$	$\frac{\alpha_0}{2\sqrt{2}}$	0	0	0	0	0	0
$\omega_1^{\#1}{}_+\alpha\beta$	α <sub>0</sub>	$\frac{\alpha_0}{2\sqrt{2}}$	$-\frac{i\alpha_0 k}{2\sqrt{2}}$	0	0	0	0
	$+^{\alpha\beta}$	$+^{\alpha\beta}$	$\dagger^{\alpha \beta}$	+α	+α	$+^{\alpha}$	$+^{\alpha}$
	$\omega_1^{\#1}$ -	$\omega_1^{\#2}$ -	$f_{1}^{\#1}$ -	$\omega_{1^{\bar{-}}}^{\#1}$	$\omega_{1}^{\#2}$ †	$f_{1}^{\#1}$	$f_{1}^{#2}$
	9	9					

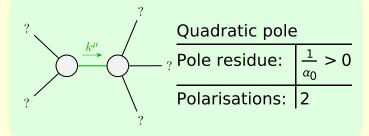
	$\sigma_{0}^{\#1}$	$\tau_{0}^{\#1}$	$ au_0^{\#2}$	$\sigma_0^{\#1}$
$\sigma_{0}^{\#1}$ †	0	$-\frac{i\sqrt{2}}{\alpha_0 k}$	0	0
$\tau_{0}^{\#1}$ †	$\frac{i\sqrt{2}}{\alpha_0 k}$	$-\frac{1}{\alpha_0 k^2}$	0	0
$\tau_{0^{+}}^{\#2}$ †	0	0	0	0
$\sigma_{2}^{\#1}$ +	0	0	0	2

	$\sigma_{2^{+}\alpha\beta}^{\#1}$	$ au_2^{\#1}_{lphaeta}$	$\sigma_{2}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2}^{\#1}\dagger^{lphaeta}$	0	$\frac{2i\sqrt{2}}{\alpha_0 k}$	0
$ au_2^{\#1} \dagger^{lphaeta}$	$-\frac{2i\sqrt{2}}{\alpha_0 k}$	$\frac{2}{\alpha_0 k^2}$	0
$\sigma_2^{\#1} \dagger^{\alpha\beta\chi}$	0	0	$-\frac{4}{\alpha_0}$

$\omega_{0}^{\#1}$	0	0	0	$\frac{\alpha_0}{2}$	
$f_{0}^{#2}$	0	0	0	0	
$f_{0}^{\#1}$	$-\frac{i\alpha_0 k}{\sqrt{2}}$	0	0	0	$\omega_2^{\#_2^2}$
$\omega_{0}^{\#_1^1}$	$\frac{\alpha_0}{2}$	$\frac{i\alpha_0k}{\sqrt{2}}$	0	0	$f_{2}^{\#}$
•	$\omega_{0}^{\#1}$ †	$f_{0}^{\#1}$ †	$f_0^{#2} +$	$\omega_{0^-}^{\#1}  \dagger$	$\omega_2^{\#1}$

	$\omega_{2}^{\#1}_{\alpha\beta}$	$f_{2}^{\#1}_{\alpha\beta}$	$\omega_{2}^{\#1}_{\alpha\beta\chi}$
$\omega_{2}^{\#1} \dagger^{lphaeta}$	$-\frac{\alpha_0}{4}$	$\frac{i \alpha_0 k}{2 \sqrt{2}}$	0
$f_{2+}^{\#1}\dagger^{\alpha\beta}$	$-\frac{i\alpha_0 k}{2\sqrt{2}}$	0	0
$\omega_2^{\#1} \dagger^{\alpha\beta\chi}$	0	0	$-\frac{\alpha_0}{4}$

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



## Unitarity conditions

 $\alpha_0 > 0$ 

(No massive particles)