Lagrangian density

Lagrangian acrisicy				
$-\frac{1}{2} r_3 \partial_i \omega^{\kappa \lambda}_{\kappa} \partial^i \omega_{\lambda \alpha}^{\alpha} - r_5 \partial_i \omega^{\kappa \lambda}_{\kappa} \partial^i \omega_{\lambda \alpha}^{\alpha} +$				
$\frac{2}{3} r_2 \partial^{\beta} \omega^{\theta \alpha}_{\kappa} \partial_{\theta} \omega_{\alpha \beta}^{\kappa} - \frac{1}{3} r_2 \partial_{\theta} \omega_{\alpha \beta}^{\kappa} \partial_{\kappa} \omega^{\alpha \beta \theta} -$				
$\frac{2}{3} r_2 \partial_{\theta} \omega_{\alpha\beta}^{ \kappa} \partial_{\kappa} \omega^{\theta\alpha\beta} + \frac{1}{2} r_3 \partial_{\alpha} \omega_{\lambda}^{ \alpha}_{ \theta} \partial_{\kappa} \omega^{\theta\kappa\lambda} - r_5 \partial_{\alpha} \omega_{\lambda}^{ \alpha}_{ \theta} \partial_{\kappa} \omega^{\theta\kappa\lambda} -$				
$\frac{1}{2} r_3 \partial_{\theta} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} + r_5 \partial_{\theta} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\theta \kappa \lambda} - \frac{1}{2} r_3 \partial_{\alpha} \omega_{\lambda}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} -$				
$r_5 \partial_{\alpha} \omega_{\lambda \ \theta}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} + r_3 \partial_{\theta} \omega_{\lambda \ \alpha}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} + 2 r_5 \partial_{\theta} \omega_{\lambda \ \alpha}^{\ \alpha} \partial_{\kappa} \omega^{\kappa \lambda \theta} +$				
$\frac{1}{3} r_2 \partial_{\kappa} \omega^{\alpha\beta\theta} \partial^{\kappa} \omega_{\alpha\beta\theta} + \frac{2}{3} r_2 \partial_{\kappa} \omega^{\theta\alpha\beta} \partial^{\kappa} \omega_{\alpha\beta\theta} - \frac{2}{3} r_2 \partial^{\beta} \omega_{I}^{\alpha\lambda} \partial_{\lambda} \omega_{\alpha\beta}^{I} +$				
$\frac{2}{3} r_2 \partial^{\beta} \omega_{I}^{\lambda \alpha} \partial_{\lambda} \omega_{\alpha \beta}^{\ \ \prime} - 4 r_3 \partial^{\beta} \omega_{I}^{\lambda \alpha} \partial_{\lambda} \omega_{\alpha \beta}^{\ \ \prime} - \frac{1}{2} r_3 \partial_{\alpha} \omega_{\lambda}^{\ \alpha} \partial^{\lambda} \omega^{\theta \kappa}_{\ \ \kappa} +$				
$r_5 \partial_{\alpha} \omega_{\lambda \ \theta}^{\ \alpha} \partial^{\lambda} \omega^{\theta \kappa}_{\ \kappa} + \frac{1}{2} r_3 \partial_{\theta} \omega_{\lambda \ \alpha}^{\ \alpha} \partial^{\lambda} \omega^{\theta \kappa}_{\ \kappa} - r_5 \partial_{\theta} \omega_{\lambda \ \alpha}^{\ \alpha} \partial^{\lambda} \omega^{\theta \kappa}_{\ \kappa}$				

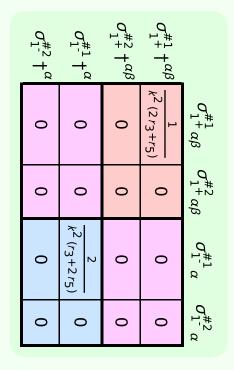
<i>r</i> !	$_{5} \sigma_{\alpha} \omega_{_{j}}$	λθ	ω··· _κ	+ -	r ₃ o	$_{\theta}\omega_{\lambda}$	α	o u
A	dded	sou	rce t	erm	: ω	αβχ	σ_{α}	:βχ
Total #:	$\sigma_{2}^{\#1}{}^{\alpha\beta\chi} == 0$	$\sigma_{1+}^{\#2\alpha\beta} == 0$	$\sigma_{1}^{\#2\alpha} == 0$	$\sigma_{0+}^{\#1} == 0$	SO(3) irreps	Source constraints		ω ω
12	5	3	3	1	#	raints		30,

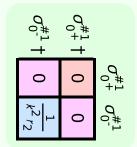
 \underline{k}^{μ}

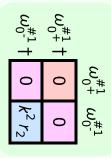
	$\omega_{2^{+}\alpha\beta}^{\#1}$	$\omega_{2-\alpha\beta\chi}^{\#1}$
$\omega_{2}^{\#1} \dagger^{\alpha\beta}$	$-\frac{3k^2r_3}{2}$	0
$\omega_2^{\#1} \dagger^{lphaeta\chi}$	0	0

	$\sigma_{2^{+}\alpha\beta}^{\#1}$	$\sigma_{2}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2}^{\#1} \dagger^{\alpha\beta}$	$-\frac{2}{3 k^2 r_3}$	0
$\sigma_{2}^{\#1} \dagger^{\alpha\beta\chi}$	0	0

	$\omega_{1}^{\#1}{}_{lphaeta}$	$\omega_{1}^{\#2}{}_{\alpha\beta}$	$\omega_{1}^{\sharp 1}{}_{lpha}$	$\omega_{1-\alpha}^{\#2}$
$\omega_{1}^{\sharp 1} \dagger^{\alpha \beta}$	$k^2 (2 r_3 + r_5)$	0	0	0
$\omega_{1}^{\#2}\dagger^{lphaeta}$	0	0	0	0
$\omega_1^{\sharp_1} {\dagger}^{lpha}$	0	0	$\frac{1}{2} k^2 (r_3 + 2 r_5)$	0
$\omega_1^{\#2} \dagger^{\alpha}$	0	0	0	0







Quadratic pole

Pole residue:
$$-\frac{1}{r_3(2r_3+r_5)(r_3+2r_5)} > 0$$

Polarisations: 2

Unitarity conditions

$$r_3 < 0 \&\& (r_5 < -\frac{r_3}{2} || r_5 > -2 r_3) || r_3 > 0 \&\& -2 r_3 < r_5 < -\frac{r_3}{2}$$

(No massive particles)