

$\omega_{0+}^{#1}$	$f_{0+}^{#1}$	$f_{0+}^{#2}$	$\omega_{0-}^{#1}$
$\frac{\alpha_0}{2}$	$-\frac{i\alpha_0 k}{\sqrt{2}}$	0	0
$\frac{i\alpha_0 k}{\sqrt{2}}$	0	0	0
0	0	0	$\frac{\alpha_0}{2}$

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

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

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

$\sigma_{2+}^{#1\alpha\beta}$	$\tau_{2+}^{#1\alpha\beta}$	$\sigma_{2-}^{#1\alpha\beta\chi}$
0	$\frac{2i\sqrt{2}}{\alpha_0 k}$	0
$-\frac{2i\sqrt{2}}{\alpha_0 k}$	$\frac{2}{\alpha_0 k^2}$	0
0	0	$-\frac{4}{\alpha_0}$

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

Lagrangian density
$-\frac{1}{2}\alpha_0 \omega_{\alpha\zeta\beta} \omega^{\alpha\beta\zeta} - \frac{1}{2}\alpha_0 \omega_{\alpha}^{\alpha\beta} \omega_{\beta}^{\zeta\zeta} - \alpha_0 f^{\alpha\beta} \partial_{\beta} \omega_{\alpha}^{\zeta\zeta} +$ $\alpha_0 \partial_{\beta} \omega^{\alpha\beta}_{\alpha} + \alpha_0 f^{\alpha\beta} \partial_{\zeta} \omega_{\alpha}^{\zeta}_{\beta} - \alpha_0 f^{\alpha}_{\alpha} \partial_{\zeta} \omega^{\beta\zeta}_{\beta}$
Added source term:
$f^{\alpha\beta} \tau_{\alpha\beta} + \omega^{\alpha\beta\chi} \sigma_{\alpha\beta\chi}$

Unitarity conditions  
 $\alpha_0 > 0$

(No massive particles)

$\sigma_{1+}^{#1\alpha\beta}$	$\sigma_{1+}^{#2\alpha\beta}$	$\tau_{1+}^{#1\alpha\beta}$	$\sigma_{1-}^{#1\alpha}$	$\sigma_{1-}^{#2\alpha}$	$\tau_{1-}^{#1\alpha}$	$\tau_{1-}^{#2\alpha}$
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
$\frac{2\sqrt{2}}{\alpha_0 + \alpha_0 k^2}$	$-\frac{2}{\alpha_0(1+k^2)^2}$	$-\frac{2ik}{\alpha_0(1+k^2)^2}$	0	0	0	0
$-\frac{2i\sqrt{2}k}{\alpha_0 + \alpha_0 k^2}$	$\frac{2ik}{\alpha_0(1+k^2)^2}$	$-\frac{2k^2}{\alpha_0(1+k^2)^2}$	0	0	0	0
0	0	0	0	$-\frac{2\sqrt{2}}{\alpha_0 + 2\alpha_0 k^2}$	0	$-\frac{4ik}{\alpha_0 + 2\alpha_0 k^2}$
0	0	0	$-\frac{2\sqrt{2}}{\alpha_0 + 2\alpha_0 k^2}$	$-\frac{2}{\alpha_0(1+2k^2)^2}$	0	$-\frac{2i\sqrt{2}k}{\alpha_0(1+2k^2)^2}$
0	0	0	0	0	0	0
0	0	0	0	0	0	$-\frac{4k^2}{\alpha_0(1+2k^2)^2}$

