

$\omega_{2+}^{\#1} + \alpha\beta$	$\omega_{2+}^{\#1}$	$f_{2+}^{\#1}$	$\omega_{2-}^{\#1}$	$\omega_{2-}^{\#1} \alpha\beta x$
$f_{2+}^{\#1} + \alpha\beta$	0	0	0	0
$\omega_{2-}^{\#1} + \alpha\beta x$	0	$k^2 \lambda$	0	0
	0	0	0	0

$\sigma_{2+}^{\#1} + \alpha\beta$	$\sigma_{2+}^{\#1}$	$\tau_{2+}^{\#1}$	$\sigma_{2-}^{\#1}$	$\sigma_{2-}^{\#1} \alpha\beta x$
$\tau_{2+}^{\#1} + \alpha\beta$	0	0	0	0
$\sigma_{2-}^{\#1} + \alpha\beta x$	0	$\frac{1}{k^2 \lambda}$	0	0
	0	0	0	0

$\omega_{0+}^{\#1} +$	$\omega_{0+}^{\#1}$	$f_{0+}^{\#1}$	$f_{0+}^{\#2}$	$\omega_{0-}^{\#1}$
$\omega_{0+}^{\#1} +$	0	0	0	0
$f_{0+}^{\#1} +$	0	$-2k^2 \lambda$	0	0
$f_{0+}^{\#2} +$	0	0	0	0
$\omega_{0-}^{\#1} +$	0	0	0	0

$\sigma_{0+}^{\#1} +$	$\tau_{0+}^{\#1} +$	$\tau_{0+}^{\#2} +$	$\sigma_{0-}^{\#1} +$
0	0	0	0
0	$-\frac{1}{2k^2 \lambda}$	0	0
0	0	0	0
0	0	0	0

$\sigma_{1+}^{\#1} \alpha\beta$	$\sigma_{1+}^{\#2} \alpha\beta$	$\tau_{1+}^{\#1} \alpha\beta$	$\sigma_{1-}^{\#1} \alpha$	$\sigma_{1-}^{\#2} \alpha$	$\tau_{1-}^{\#1} \alpha$	$\tau_{1-}^{\#2} \alpha$
$\sigma_{1+}^{\#1} + \alpha\beta$	0	0	0	0	0	0
$\sigma_{1+}^{\#2} + \alpha\beta$	0	0	0	0	0	0
$\tau_{1+}^{\#1} + \alpha\beta$	0	0	0	0	0	0
$\sigma_{1-}^{\#1} + \alpha$	0	0	0	0	0	0
$\sigma_{1-}^{\#2} + \alpha$	0	0	0	0	0	0
$\tau_{1-}^{\#1} + \alpha$	0	0	0	0	0	0
$\tau_{1-}^{\#2} + \alpha$	0	0	0	0	0	0

$\omega_{1+}^{\#1} + \alpha\beta$	$\omega_{1+}^{\#1}$	$\omega_{1+}^{\#2}$	$f_{1+}^{\#1}$	$\omega_{1-}^{\#1} \alpha$	$\omega_{1-}^{\#2} \alpha$	$f_{1-}^{\#1} \alpha$	$f_{1-}^{\#2} \alpha$
$\omega_{1+}^{\#1} + \alpha\beta$	0	0	0	0	0	0	0
$\omega_{1+}^{\#2} + \alpha\beta$	0	0	0	0	0	0	0
$f_{1+}^{\#1} + \alpha\beta$	0	0	0	0	0	0	0
$\omega_{1-}^{\#1} + \alpha$	0	0	0	0	0	0	0
$\omega_{1-}^{\#2} + \alpha$	0	0	0	0	0	0	0
$f_{1-}^{\#1} + \alpha$	0	0	0	0	0	0	0
$f_{1-}^{\#2} + \alpha$	0	0	0	0	0	0	0

Lagrangian density

$$\begin{aligned}
& -\lambda \omega_{\mu\kappa\theta} \omega^{\mu\theta\kappa} - \lambda \omega_{\mu\theta\kappa}^{\prime} \omega_{\kappa}^{\prime\mu\theta} - \lambda \omega_{\mu\alpha\kappa}^{\prime} \omega_{\kappa\alpha}^{\prime\mu} - \lambda \omega_{\mu\kappa\alpha}^{\prime} \omega_{\kappa\alpha}^{\prime\mu} - \\
& 2\lambda f^{\prime\mu\theta} \partial_{\theta} \omega_{\mu\kappa}^{\prime} + 2\lambda \partial_{\theta} \omega_{\mu\kappa}^{\prime\theta} + 2\lambda f^{\prime\mu\theta} \partial_{\kappa} \omega_{\mu\theta}^{\prime\kappa} - 2\lambda f_{\mu\theta}^{\prime} \partial_{\kappa} \omega^{\mu\theta\kappa} - \\
& \frac{1}{2} \lambda \partial^{\alpha} f_{\theta\kappa} \partial^{\kappa} f_{\alpha}^{\theta} - \frac{1}{2} \lambda \partial^{\alpha} f_{\kappa\theta} \partial^{\theta} f_{\alpha}^{\kappa} - \frac{1}{2} \lambda \partial^{\alpha} f_{\kappa\alpha}^{\zeta} \partial^{\kappa} f_{\alpha\zeta} + \\
& \lambda \omega_{\kappa\alpha}^{\prime} \partial^{\kappa} f_{\mu}^{\prime} + \lambda \omega_{\kappa\zeta}^{\prime} \partial^{\kappa} f_{\mu}^{\prime} + 2\lambda \partial^{\alpha} f_{\kappa\alpha} \partial^{\kappa} f_{\mu}^{\prime} - \lambda \partial_{\kappa} f_{\zeta}^{\zeta} \partial^{\kappa} f_{\mu}^{\prime} + \\
& 2\lambda \omega_{\mu\kappa\theta} \partial^{\kappa} f^{\prime\mu\theta} - \lambda \omega_{\mu\alpha\kappa}^{\prime} \partial^{\kappa} f_{\mu}^{\prime} - \lambda \omega_{\mu\zeta\kappa}^{\prime} \partial^{\kappa} f_{\mu}^{\prime} + \frac{1}{2} \lambda \partial^{\alpha} f_{\kappa}^{\zeta} \partial^{\kappa} f_{\zeta\alpha} + \\
& \frac{1}{2} \lambda \partial_{\kappa} f_{\theta}^{\zeta} \partial^{\kappa} f_{\zeta}^{\theta} + \frac{1}{2} \lambda \partial_{\kappa} f_{\theta}^{\zeta} \partial^{\kappa} f_{\zeta}^{\theta} - \lambda \partial^{\alpha} f_{\alpha}^{\zeta} \partial^{\kappa} f_{\zeta\kappa}
\end{aligned}$$

Added source term: $f^{\alpha\beta} \tau_{\alpha\beta} + \omega^{\alpha\beta\chi} \sigma_{\alpha\beta\chi}$

Source constraints

SO(3) irreps	#
$\sigma_{0-}^{\#1} == 0$	1
$\tau_{0+}^{\#2} == 0$	1
$\sigma_{0+}^{\#1} == 0$	1
$\tau_{1-}^{\#2\alpha} == 0$	3
$\tau_{1-}^{\#1\alpha} == 0$	3
$\sigma_{1-}^{\#2\alpha} == 0$	3
$\sigma_{1-}^{\#1\alpha} == 0$	3
$\tau_{1+}^{\#1\alpha\beta} == 0$	3
$\sigma_{1+}^{\#2\alpha\beta} == 0$	3
$\sigma_{1+}^{\#1\alpha\beta} == 0$	3
$\sigma_{2-}^{\#1\alpha\beta\chi} == 0$	5
$\sigma_{2+}^{\#1\alpha\beta} == 0$	5
Total #:	34

Unitarity conditions
 $\lambda > 0$

(No massive particles)

