

Lagrangian density	
$-\frac{1}{2}a_0\Gamma^{\alpha\beta\chi}\Gamma_{\beta\chi\alpha}+\frac{1}{2}a_0\Gamma^{\alpha}\beta\Gamma_{\chi}\beta-\frac{1}{2}a_0\Gamma^{\alpha\beta\chi}\partial_{\beta}h_{\alpha\chi}-$ $\frac{1}{4}a_0\Gamma^{\alpha}\beta\partial_{\beta}h^{\chi}\chi+\frac{1}{4}a_0\Gamma^{\alpha\beta}\partial_{\beta}h^{\chi}\chi-\frac{1}{4}a_0h^{\chi}\chi\partial_{\beta}\Gamma^{\alpha}\beta+\frac{1}{4}a_0h^{\chi}\chi\partial_{\beta}\Gamma^{\alpha\beta}\alpha-$ $\frac{1}{2}a_0h_{\alpha\chi}\partial_{\beta}\Gamma^{\alpha\beta\chi}+\frac{11}{2}c_1\partial^{\alpha}\Gamma^{\chi\delta}\delta\partial_{\beta}\Gamma^{\chi\alpha}\beta+\frac{1}{2}c_1\partial^{\alpha}\Gamma^{\chi\alpha}\beta\partial_{\beta}\Gamma^{\chi\delta}\delta-$ $19c_1\partial^{\alpha}\Gamma^{\chi\delta}\chi\partial_{\beta}\Gamma^{\delta\alpha}\beta+\frac{1}{4}a_0h^{\alpha\beta}\partial_{\beta}\partial_{\alpha}h^{\chi}\chi-\frac{1}{8}a_0\partial_{\beta}h^{\chi}\chi\partial^{\beta}h^{\alpha}\alpha+$ $\frac{1}{2}a_0\Gamma^{\alpha}\beta\partial_{\chi}h^{\chi}\beta+\frac{1}{4}a_0\partial^{\beta}h^{\alpha}\alpha\partial_{\chi}h^{\chi}\beta+\frac{37}{4}c_1\partial_{\beta}\partial_{\alpha}h^{\delta}\delta\partial_{\chi}\Gamma^{\alpha\beta\chi}+$ $\frac{3}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\chi}\partial_{\alpha}h^{\delta}\delta-\frac{1}{2}a_0h^{\alpha\beta}\partial_{\chi}\partial_{\beta}h^{\chi}\alpha+\frac{1}{4}a_0h^{\alpha}\alpha\partial_{\chi}\partial_{\beta}h^{\chi}\beta+$ $\frac{1}{4}a_0h^{\alpha\beta}\partial_{\chi}\partial^{\chi}h_{\alpha\beta}-\frac{1}{4}a_0h^{\alpha}\alpha\partial_{\chi}\partial^{\chi}h^{\beta}\beta-\frac{1}{4}a_0\partial_{\beta}h_{\alpha\chi}\partial^{\chi}h^{\alpha}\beta+$ $\frac{1}{8}a_0\partial_{\chi}h_{\beta\alpha}\partial^{\chi}h^{\alpha\beta}+\frac{1}{2}a_0h_{\beta\chi}\partial^{\chi}\Gamma^{\alpha}\beta-\frac{1}{2}c_1\partial_{\beta}\Gamma^{\delta}\delta\partial^{\chi}\Gamma^{\alpha}\beta-$ $\frac{1}{2}c_1\partial_{\beta}\Gamma^{\delta}\delta\chi\Gamma^{\alpha}\beta+\frac{1}{2}c_1\partial_{\chi}\Gamma^{\delta}\delta\partial^{\chi}\Gamma^{\alpha}\beta-\frac{1}{2}c_1\partial_{\chi}\Gamma^{\delta}\beta\delta\partial^{\chi}\Gamma^{\alpha}\beta-$ $\frac{1}{2}c_1\partial_{\chi}\Gamma^{\delta}\delta\beta\partial^{\chi}\Gamma^{\alpha}\beta-\frac{3}{4}c_1\partial_{\chi}\partial_{\beta}h^{\delta}\delta\partial^{\chi}\Gamma^{\alpha}\beta-\frac{11}{2}c_1\partial_{\beta}\Gamma^{\chi}\delta\partial^{\chi}\Gamma^{\alpha\beta}\alpha+$ $\frac{19}{2}c_1\partial_{\beta}\Gamma^{\delta}\chi\delta\partial^{\chi}\Gamma^{\alpha\beta}\alpha+\frac{11}{2}c_1\partial_{\chi}\Gamma^{\delta}\beta\delta\partial^{\chi}\Gamma^{\alpha\beta}\alpha-\frac{1}{2}c_1\partial_{\chi}\Gamma^{\delta}\beta\delta\partial^{\chi}\Gamma^{\alpha\beta}\alpha-$ $\frac{37}{4}c_1\partial_{\chi}\partial_{\beta}h^{\delta}\delta\partial^{\chi}\Gamma^{\alpha\beta}\alpha+c_1\partial_{\alpha}\Gamma^{\chi}\delta\partial^{\chi}\Gamma^{\alpha\beta}\beta-c_1\partial_{\chi}\Gamma^{\delta}\alpha\partial^{\chi}\Gamma^{\alpha\beta}\beta-$ $\frac{9}{2}c_1\partial_{\chi}\partial_{\beta}h^{\delta}\delta\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}+\frac{17}{8}c_1\partial_{\chi}\partial_{\beta}h^{\delta}\delta\partial^{\chi}\partial^{\beta}h^{\alpha}\alpha-\frac{1}{2}c_1\partial_{\chi}\Gamma^{\alpha\beta\chi}\partial_{\delta}\Gamma^{\delta}\delta-$ $\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\Gamma^{\delta}\delta-\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\Gamma^{\delta}\chi+\frac{19}{2}c_1\partial_{\chi}\Gamma^{\alpha\beta\chi}\partial_{\delta}\Gamma^{\delta}\beta\alpha+$ $c_1\partial^{\chi}\Gamma^{\alpha}\beta\partial_{\delta}\Gamma^{\delta}\chi\beta+\frac{1}{2}c_1\partial^{\chi}\Gamma^{\alpha}\beta\partial_{\delta}\Gamma^{\chi\beta}\delta+\frac{1}{2}c_1\partial^{\chi}\Gamma^{\alpha\beta}\alpha\partial_{\delta}\Gamma^{\chi\beta}\delta-$ $\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\Gamma^{\delta}\chi\alpha+\frac{1}{2}c_1\partial^{\chi}\Gamma^{\beta}\delta\partial_{\alpha}\Gamma^{\delta\alpha}+c_1\partial^{\chi}\Gamma^{\alpha}\beta\partial_{\delta}\Gamma^{\chi}\beta-$ $\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha}\beta\partial_{\delta}\Gamma^{\chi}\chi\delta+c_1\partial_{\beta}\Gamma^{\alpha}\beta\partial_{\delta}\Gamma^{\chi\delta}\delta-\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\beta}\alpha\partial_{\delta}\Gamma^{\chi\delta}\delta-$ $\frac{37}{4}c_1\partial_{\chi}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial_{\alpha}h^{\beta}\beta-\frac{3}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial_{\alpha}h^{\chi}\chi-\frac{37}{4}c_1\partial_{\chi}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial_{\beta}h^{\alpha}\alpha+$ $\frac{3}{8}c_1\partial_{\chi}\partial^{\beta}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h^{\alpha}\delta+\frac{37}{8}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h^{\chi}\delta+\frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}\beta\partial_{\delta}\partial_{\beta}h^{\chi}\delta+$ $\frac{37}{4}c_1\partial^{\chi}\Gamma^{\alpha\beta}\alpha\partial_{\delta}\partial_{\beta}h^{\chi}\delta-\frac{3}{8}c_1\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h^{\chi}\delta+\frac{13}{4}c_1\partial^{\chi}\partial^{\beta}h^{\alpha}\alpha\partial_{\delta}\partial_{\beta}h^{\chi}\delta-$ $\frac{3}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial_{\chi}h^{\alpha}\delta-\frac{43}{8}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h^{\beta}\delta+\frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}\beta\partial_{\delta}\partial_{\chi}h^{\beta}\delta+$ $\frac{37}{4}c_1\partial^{\chi}\Gamma^{\alpha\beta}\alpha\partial_{\delta}\partial_{\chi}h^{\beta}\delta+\frac{17}{8}c_1\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h^{\beta}\delta-\frac{29}{4}c_1\partial^{\chi}\partial^{\beta}h^{\alpha}\alpha\partial_{\delta}\partial_{\chi}h^{\beta}\delta+$ $c_1\partial_{\beta}\Gamma^{\alpha}\beta\partial_{\delta}\partial_{\chi}h^{\chi\delta}-c_1\partial_{\beta}\Gamma^{\alpha\beta}\alpha\partial_{\delta}\partial_{\chi}h^{\chi\delta}-\frac{1}{2}c_1\partial_{\beta}\partial^{\beta}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h^{\chi\delta}+$ $c_1\partial_{\beta}\partial^{\beta}h^{\alpha}\alpha\partial_{\delta}\partial_{\chi}h^{\chi\delta}+\frac{37}{4}c_1\partial_{\chi}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\beta}+\frac{17}{8}c_1\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\beta}+$ $\frac{3}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi}+\frac{1}{4}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}-\frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}\beta\partial_{\delta}\partial^{\delta}h_{\beta\chi}-$ $\frac{37}{4}c_1\partial^{\chi}\Gamma^{\alpha\beta}\alpha\partial_{\delta}\partial^{\delta}h_{\beta\chi}-\frac{73}{8}c_1\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi}+\frac{17}{4}c_1\partial^{\chi}\partial^{\beta}h^{\alpha}\alpha\partial_{\delta}\partial^{\delta}h_{\beta\chi}-$ $c_1\partial_{\beta}\Gamma^{\alpha}\beta\partial_{\delta}\partial^{\delta}h^{\chi}\chi+c_1\partial_{\beta}\Gamma^{\alpha\beta}\alpha\partial_{\delta}\partial^{\delta}h^{\chi}\chi-\frac{1}{2}c_1\partial_{\beta}\partial^{\beta}h^{\alpha}\alpha\partial_{\delta}\partial^{\delta}h^{\chi}\chi+$ $\frac{1}{2}c_1\partial_{\alpha}\Gamma^{\chi\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi}+c_1\partial_{\alpha}\Gamma^{\beta\delta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi}+c_1\partial_{\alpha}\Gamma^{\chi\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi}+$ $\frac{1}{2}c_1\partial_{\alpha}\Gamma^{\chi\delta\beta}\partial^{\delta}\Gamma^{\alpha\beta\chi}+c_1\partial_{\alpha}\Gamma^{\delta\beta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi}+c_1\partial_{\alpha}\Gamma^{\delta\chi\beta}\partial^{\delta}\Gamma^{\alpha\beta\chi}-$ $\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\chi\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi}-\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\delta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi}-\frac{1}{2}c_1\partial_{\beta}\Gamma^{\chi\delta\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi}-$ $\frac{3}{2}c_1\partial_{\beta}\partial_{\alpha}h^{\chi\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi}-\frac{1}{2}c_1\partial_{\chi}\Gamma^{\alpha\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi}-\frac{1}{2}c_1\partial_{\chi}\Gamma^{\beta\alpha\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi}+$ $c_1\partial_{\chi}\Gamma^{\beta\delta\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi}+\frac{3}{2}c_1\partial_{\chi}\partial_{\alpha}h^{\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi}-c_1\partial_{\delta}\Gamma^{\alpha\beta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi}-$ $c_1\partial_{\delta}\Gamma^{\alpha\chi\beta}\partial^{\delta}\Gamma^{\alpha\beta\chi}-\frac{1}{2}c_1\partial_{\delta}\Gamma^{\beta\alpha\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi}-\frac{1}{2}c_1\partial_{\delta}\Gamma^{\beta\chi\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi}-$ $\frac{1}{2}c_1\partial_{\delta}\Gamma^{\chi\beta\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi}+\frac{3}{2}c_1\partial_{\beta}\partial_{\beta}h_{\alpha\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi}-\frac{3}{2}c_1\partial_{\delta}\partial_{\chi}h_{\alpha\beta}\partial^{\delta}\Gamma^{\alpha\beta\chi}-$ $\frac{11}{2}c_1\partial_{\beta}\Gamma^{\delta\alpha}\beta\partial^{\delta}\Gamma^{\alpha\chi}\chi-\frac{1}{2}c_1\partial^{\alpha}\Gamma^{\delta\alpha}\beta\partial^{\delta}\Gamma^{\chi}\beta+\frac{1}{2}c_1\partial_{\beta}\Gamma^{\delta\alpha}\beta\partial^{\delta}\Gamma^{\chi\alpha}\chi-$ $\frac{10}{4}c_1\partial_{\beta}\partial_{\alpha}h^{\chi\delta}\partial^{\delta}\partial^{\chi}h^{\alpha\beta}+\frac{3}{2}c_1\partial_{\chi}\partial_{\beta}h^{\chi\alpha\delta}\partial^{\delta}\partial^{\chi}h^{\alpha\beta}-\frac{3}{4}c_1\partial_{\delta}\partial_{\chi}h_{\alpha\beta}\partial^{\delta}\partial^{\chi}h^{\alpha\beta}$	
Added source term: $ h^{\alpha\beta}\mathcal{T}_{\alpha\beta}+\Gamma^{\alpha\beta\chi}\Delta_{\alpha\beta\chi}$	

Massive particle	
Pole residue:	$-\frac{4164}{24389c_1}>0$
Polarisations:	3
Square mass:	$\frac{40}{29c_1}>0$
Spin:	1
Parity:	Even

Massive particle	
Pole residue:	$\frac{4907}{35937c_1}>0$
Polarisations:	3
Square mass:	$\frac{40}{33c_1}>0$
Spin:	1
Parity:	Odd

Massive particle	
Pole residue:	$\frac{7}{7c_1}>0$
Polarisations:	7
Square mass:	$-\frac{40}{7c_1}>0$
Spin:	3
Parity:	Odd

Massive particle	
Pole residue:	$\frac{4}{5c_1}>0$
Polarisations:	5
Square mass:	$\frac{40}{5c_1}>0$
Spin:	2
Parity:	Odd

Massive particle	
Pole residue:	$-\frac{2}{c_1}>0$
Polarisations:	1
Square mass:	$\frac{40}{c_1}>0$
Spin:	0
Parity:	Odd

Massive particle	
Pole residue:	$\frac{4}{c_1}>0$
Polarisations:	5
Square mass:	$\frac{40}{5c_1}>0$
Spin:	2
Parity:	Odd

Massive particle	
Pole residue:	$-\frac{2}{c_1}>0$
Polarisations:	1
Square mass:	$\frac{40}{c_1}>0$
Spin:	0
Parity:	Odd

Massive particle	
Pole residue:	$\frac{4}{c_1}>0$
Polarisations:	5
Square mass:	$\frac{40}{c_1}>0$
Spin:	2
Parity:	Odd

Massive particle	
Pole residue:	$-\frac{4}{c_1}>0$
Polarisations:	2

Unitarity conditions

(Unitarity is demonstrably impossible)

$\Delta_{1+}^{\#1}+\alpha\beta$	$\Delta_{1+}^{\#2}+\alpha\beta$	$\Delta_{1+}^{\#3}+\alpha\beta$	$\Delta_{1+}^{\#1}\alpha$	$\Delta_{1+}^{\#2}\alpha$	$\Delta_{1+}^{\#3}\alpha$	$\Delta_{1+}^{\#4}\alpha$	$\Delta_{1+}^{\#5}\alpha$	$\Delta_{1+}^{\#6}\alpha$	$\mathcal{T}_{1+}^{\#1}\alpha$
0	$-\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0	0	0	0
$-\frac{2\sqrt{2}}{a_0}$	$\frac{2(a_0^2-14a_0c_1k^2-35c_1^2k^4)}{a_0^2(a_0-29c_1k^2)}$	$\frac{40\sqrt{2}c_1k^2}{a_0^2-29a_0c_1k^2}$	0	0	0	0	0	0	0
0	$\frac{40\sqrt{2}c_1k^2}{a_0^2-29a_0c_1k^2}$	$\frac{4}{a_0-29c_1k^2}$	0	0	0	0	0	0	0
0	0	0	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0
0	0	0	0	0	$\frac{2(a_0^2-30a_0c_1k^2+401c_1^2k^4)}{a_0^2(a_0-33c_1k^2)}$	$-\frac{5\sqrt{\frac{10}{3}}c_1k^2}{a_0^2-33a_0c_1k^2}$	$-\frac{10c_1k^2(-11a_0+118c_1k^2)}{\sqrt{3}a_0^2(a_0-33c_1k^2)}$	$\frac{50\sqrt{\frac{2}{3}}c_1k^2}{a_0^2-33a_0c_1k^2}$	0
0	0	0	0	0	$\frac{5\sqrt{\frac{2}{3}}c_1k^2(7a_0-236c_1k^2)}{a_0^2(a_0-33c_1k^2)}$	$-\frac{19a_0k^2+472a_0c_1k^2+5120c_1^2k^4}{12a_0^2(a_0-33c_1k^2)}$	$-\frac{\sqrt{5}(5a_0-164c_1k^2)}{12a_0(a_0-33c_1k^2)}$	$-\frac{a_0-28c_1k^2}{6a_0^2-198a_0c_1k^2}$	0
0	0	0	0	0	$-\frac{5\sqrt{\frac{10}{3}}c_1k^2}{a_0^2-33a_0c_1k^2}$	$-\frac{5\sqrt{\frac{10}{3}}c_1k^2}{a_0^2-33a_0c_1k^2}$	$-\frac{\sqrt{\frac{5}{2}}(a_0-82c_1k^2)}{6a_0(a_0-33c_1k^2)}$	$-\frac{\sqrt{5}}{6(a_0-33c_1k^2)}$	0
0	0	0	0	0	$\frac{10c_1k^2(-11a_0+118c_1k^2)}{\sqrt{3}a_0^2(a_0-33c_1k^2)}$	$-\frac{10c_1k^2(-11a_0+118c_1k^2)}{\sqrt{3}a_0^2(a_0-33c_1k^2)}$	$-\frac{7(a_0+2c_1k^2)}{3\sqrt{2}a_0(a_0-33c_1k^2)}$	$-\frac{7(a_0+2c_1k^2)}{3\sqrt{2}a_0(a_0-33c_1k^2)}$	0
0	0	0	0	0	$\frac{50\sqrt{\frac{2}{3}}c_1k^2}{a_0^2-33a_0c_1k^2}$	$-\frac{a_0-28c_1k^2}{a_0^2-33a_0c_1k^2}$	$-\frac{\sqrt{5}}{6(a_0-33c_1k^2)}$	$-\frac{5}{3(a_0-33c_1k^2)}$	0
0	0	0	0	0	0	0	0	0	0

$\Gamma_{1+}^{\#1}+\alpha\beta$	$\Gamma_{1+}^{\#2}+\alpha\beta$	$\Gamma_{1+}^{\#3}+\alpha\beta$	$\Gamma_{1+}^{\#1}\alpha$	$\Gamma_{1+}^{\#2}\alpha$	$\Gamma_{1+}^{\#3}\alpha$	$\Gamma_{1+}^{\#4}\alpha$	$\Gamma_{1+}^{\#5}\alpha$	$\Gamma_{1+}^{\#6}\alpha$	$h_{1+}^{\#1}\alpha$
$\frac{1}{4}(-a_0-15c_1k^2)-\frac{a_0}{2\sqrt{2}}$	$5c_1k^2$	0	0	0	0	0	0	0	0
$-\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0	0
$5c_1k^2$	$0-\frac{1}{4}(a_0-29c_1k^2)$	0	0	0	0	$-\frac{5}{2}\sqrt{\frac{2}{3}}c_1k^2$	0	0	0
0	0	0	$\frac{1}{4}(-a_0-3c_1k^2)$	$\frac{a_0}{2\sqrt{2}}$	0	$-\frac{5}{2}\sqrt{\frac{2}{3}}c_1k^2$	$5\sqrt{\frac{2}{3}}c_1k^2$	$-\frac{5c_1k^2}{\sqrt{3}}$	0
0	0	0	$\frac{a_0}{2\sqrt{2}}$	$-\frac{a_0}{2\sqrt{2}}$	0	$-\frac{a_0}{6\sqrt{2}}$	0	0	0
0	0	0	$\frac{5}{2}\sqrt{3}c_1k^2$	$-\frac{5}{2}\sqrt{3}c_1k^2$	0	$-\frac{1}{6}(-a_0+8c_1k^2)$	$-\frac{a_0}{6\sqrt{2}}$	$\frac{1}{6}(-a_0+20c_1k^2)$	0
0	0	0	$-\frac{5}{2}\sqrt{\frac{2}{3}}c_1k^2$	$\frac{5}{2}\sqrt{\frac{2}{3}}c_1k^2$	0	$\frac{1}{3}(a_0+7c_1k^2)$	$-\frac{1}{6}\sqrt{\frac{5}{2}}(a_0+16c_1k^2)$	$-\frac{1}{6}\sqrt{5}(a_0-5c_1k^2)$	0
0	0	0	$5\sqrt{\frac{2}{3}}c_1k^2$	$-\frac{5}{2}\sqrt{\frac{2}{3}}c_1k^2$	0	$-\frac{1}{6}\sqrt{\frac{5}{2}}(a_0+16c_1k^2)$	$\frac{a_0}{3}$	$\frac{a_0+40c_1k^2}{6\sqrt{2}}$	0
0	0	0	$-\frac{5c_1k^2}{\sqrt{3}}$	$\frac{5c_1k^2}{\sqrt{3}}$	0	$-\frac{1}{6}(-a_0+20c_1k^2)$	$\frac{a_0+40c_1k^2}{6\sqrt{2}}$	$\frac{5}{12}(a_0-17c_1k^2)$	0
0	0	0	0	0	0	0	0	0	0

$$\Gamma_{3+}^{\#1}+\alpha\beta\chi\boxed{\frac{1}{2}(-a_0-7c_1k^2)}$$

$$\Delta_{3+}^{\#1}+\alpha\beta\chi\boxed{-\frac{2}{a_0+7c_1k^2}}$$

$\Delta_{2+}^{\#1}+\alpha\beta$	$\Delta_{2+}^{\#2}+\alpha\beta$	$\Delta_{2+}^{\#3}+\alpha\beta$	$\mathcal{T}_{2+}^{\#1}\alpha\beta$	$\Delta_{2+}^{\#1}\alpha\beta\chi$	$\Delta_{2+}^{\#2}\alpha\beta\chi$
$\frac{4(a_0-11c_1k^2)}{a_0^2}$	$40\sqrt{\frac{2}{3}}\frac{c_1k^2}{a_0^2}$	$-\frac{80c_1k^2}{\sqrt{3}a_0^2}$	$-\frac{441\sqrt{2}c_1k}{a_0^2}$	0	0
$\frac{40\sqrt{\frac{2}{3}}c_1k^2}{a_0^2}$	$-\frac{2(3a_0+c_1k^2)}{3a_0^2}$	$-\frac{2\sqrt{2}c_1k^2}{3a_0^2}$	$-\frac{80ic_1k}{\sqrt{3}a_0^2}$	0	0
$-\frac{80c_1k^2}{\sqrt{3}a_0^2}$	$-\frac{2\sqrt{2}c_1k^2}{3a_0^2}$	$-\frac{4(3a_0+c_1k^2)}{3a_0^2}$	$-\frac{80i\sqrt{\frac{2}{3}}c_1k}{a_0^2}$	0	0
$\frac{44i\sqrt{2}c_1k}{a_0^2}$	0	0	$-\frac{8(a_0+11c_1k^2)}{a_0^2k^2}$	0	0
0	0	0	$-\frac{4}{a_0-c_1k^2}$	0	0
0	0	0	0	0	$\frac{4}{a_0-5c_1k^2}$

Source constraints	
SO(3) irreps	#
$\mathcal{T}_{0+}^{\#2}==0$	1
$\Delta_{0+}^{\#3}+2\Delta_{0+}^{\#4}+3\Delta_{0+}^{\#2}==0$	1
$\mathcal{T}_{1+}^{\#1}\alpha==0$	3
$2\Delta_{1+}^{\#6\alpha}+\Delta_{1+}^{\#4\alpha}+2\Delta_{1+}^{\#5\alpha}+\Delta_{1+}^{\#3\alpha}==0$	3
Total #:	8

$\Delta_{0+}^{\#1}+$	$\Delta_{0+}^{\#2}+$	$\Delta_{0+}^{\#3}+$	$\Delta_{0+}^{\#4}+$	$\mathcal{T}_{0+}^{\#1}$	$\mathcal{T}_{0+}^{\#2}$	$\Delta_{0+}^{\#1}$
$-\frac{2(a_0+25c_1k^2)}{a_0^2}$	$\frac{10\sqrt{6}c_1k^2}{a_0^2}$	$-\frac{10\sqrt{\frac{2}{3}}c_1k^2}{a_0^2}$	$-\frac{20c_1k^2}{\sqrt{3}a_0^2}$	$-\frac{50i\sqrt{2}c_1k}{a_0^2}$	0	0
$\frac{10\sqrt{6}c_1k^2}{a_0^2}$	$-\frac{3(a_0+23c_1k^2)}{4a_0^2}$	$\frac{5a_0+23c_1k^2}{4a_0^2}$	$-\frac{a_0-23c_1k^2}{2\sqrt{2}a_0^2}$	$\frac{20i\sqrt{3}c_1k}{a_0^2}$	0	0
$-\frac{10\sqrt{\frac{2}{3}}c_1k^2}{a_0^2}$	$\frac{5a_0+23c_1k^2}{4a_0^2}$	$-\frac{9a_0+23c_1k^2}{12a_0^2}$	$\frac{3a_0+23c_1k^2}{6\sqrt{2}a_0^2}$	$-\frac{20ic_1k}{\sqrt{3}a_0^2}$	0	0
$-\frac{20c_1k^2}{\sqrt{3}a_0^2}$	$-\frac{a_0-23c_1k^2}{2\sqrt{2}a_0^2}$	$-\frac{3a_0+23c_1k^2}{6\sqrt{2}a_0^2}$	$\frac{3a_0-23c_1k^2}{6a_0^2}$	$-\frac{20i\sqrt{\frac{2}{3}}c_1k}{a_0^2}$	0	0
$\frac{50i\sqrt{2}c_1k}{a_0^2}$	$-\frac{20i\sqrt{3}c_1k}{a_0^2}$	$\frac{20ic_1k}{\sqrt{3}a_0^2}$	$\frac{20i\sqrt{\frac{2}{3}}c_1k}{a_0^2}$	$\frac{4(a_0-25c_1k^2)}{a_0^2k^2}$	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	$-\frac{2}{a_0-c_1k^2}$

$\Gamma_{0+}^{\#1}$	$\Gamma_{0+}^{\#2}$	$\Gamma_{0+}^{\#3}$	$\Gamma_{0+}$
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