Wave operator and propagator

Ĺ	$\Delta_{1}^{\#1}{}_{lphaeta}$	$\Delta_{1}^{\#2}{}_{lphaeta}$	$\Delta_{1}^{\#3}{}_{lphaeta}$	$\Delta_{1}^{\#1}{}_{lpha}$	$\Delta_{1^{-}\ \alpha}^{\#2}$	$\Delta_{1^{-}\alpha}^{\#3}$	$\Delta_1^{\#4}{}_{lpha}$	$\Delta_{1^{-}\alpha}^{\#5}$	$\Delta^{\#6}_{1^-\alpha}$	${\mathcal T}_{ exttt{1}}^{ exttt{#-}1}{}_lpha$
$\Delta_{1}^{#1} \dagger^{lphaeta}$	0	$-\frac{2\sqrt{2}}{a_0}$	0	0	0	0	0	0	0	0
$\Delta_{1}^{#2} \dagger^{\alpha\beta}$	$\begin{array}{c c} 2 \sqrt{2} \\ a_0 \end{array}$	$\frac{(a_0^2 - 14 a_0 a_1 k^2 - 35 a_1^2 k^2)}{a_0^2 (a_0 - 29 a_1 k^2)}$	$\frac{40\sqrt{2} a_1 k^2}{a_0^2 - 29 a_0 a_1 k^2}$	0	0	0	0	0	0	0
$\Delta_{1}^{#3} \dagger^{\alpha\beta}$	0	$\frac{40\sqrt{2} a_1 k^2}{a_0^2 - 29 a_0 a_1 k^2}$	$\frac{4}{a_0-29a_1k^2}$	0	0	0	0	0	0	0
$\Delta_{1}^{#1} \uparrow^{\alpha}$	0	0	0	0	$\frac{\sqrt{2} (4+k^2)}{a_0 (2+k^2)}$	$-\frac{2 k^2}{\sqrt{3} a_0 (2+k^2)}$	0	$\frac{\sqrt{\frac{2}{3}} k^2}{a_0 (2+k^2)}$	0	$-\frac{2i\sqrt{2}k}{a_0(2+k^2)}$
$\Delta_1^{#2} \dagger^{\alpha}$	0	0	0	$\frac{\sqrt{2} (4+k^2)}{a_0 (2+k^2)}$	$\frac{a_0^2 (4+k^2)^2 - 30 a_0 a_1 k^2 (4+k^2) (4+3 k^2) + a_1^2 k^4 (6416 + 7928 k^2 + 1901 k^4)}{2 a_0^2 (2+k^2)^2 (a_0 - 33 a_1 k^2)}$	$\frac{k^2 (a_0^2 (-2+k^2) + a_0 a_1 (560 + 302 k^2 + 71 k^4) - 2 a_1^2 k^2 (9440 + 1901 k^2 (4+k^2)))}{2 \sqrt{6} a_0^2 (2+k^2)^2 (a_0 - 33 a_1 k^2)}$	$-\frac{\sqrt{\frac{5}{6}} k^2 (a_0 + a_1 (40 - 31 k^2))}{2 a_0 (2 + k^2) (a_0 - 33 a_1 k^2)}$	$\frac{k^2 (2 a_0^2 (5+2 k^2)-a_0 a_1 (880+778 k^2+199 k^4)+a_1^2 k^2 (9440+1901 k^2 (4+k^2)))}{2 \sqrt{3} a_0^2 (2+k^2)^2 (a_0-33 a_1 k^2)}$	$\frac{k^2 \left(-a_0 + a_1 \left(200 + 43 k^2\right)\right)}{\sqrt{6} a_0 \left(2 + k^2\right) \left(a_0 - 33 a_1 k^2\right)}$	$-\frac{i k (-30 a_0 a_1 k^4 + a_0^2 (4 + k^2) + 27 a_1^2 k^4 (-28 + 3 k^2))}{a_0^2 (2 + k^2)^2 (a_0 - 33 a_1 k^2)}$
$\Delta_1^{#3} \uparrow^{\alpha}$	0	0	0	$-\frac{2k^2}{\sqrt{3}(2a_0+a_0k^2)}$	$\frac{k^2 (a_0^2 (-2+k^2) + a_0 a_1 (560 + 302 k^2 + 71 k^4) - 2 a_1^2 k^2 (9440 + 1901 k^2 (4+k^2)))}{2 \sqrt{6} a_0^2 (2+k^2)^2 (a_0 - 33 a_1 k^2)}$	$\frac{-a_0^2 \left(76+52 k^2+3 k^4\right)+4 a_0 a_1 k^2 \left(472+214 k^2+19 k^4\right)+4 a_1^2 k^4 \left(5120+7280 k^2+1901 k^4\right)}{12 a_0^2 \left(2+k^2\right)^2 \left(a_0-33 a_1 k^2\right)}$	$\frac{\sqrt{5} (10 a_0 + (3 a_0 - 328 a_1) k^2 - 62 a_1 k^4)}{12 a_0 (2 + k^2) (a_0 - 33 a_1 k^2)}$	$\frac{2 a_0^2 (-2+k^2) + a_0 a_1 k^2 (472 + 934 k^2 + 289 k^4) - 2 a_1^2 k^4 (5120 + 7280 k^2 + 1901 k^4)}{6 \sqrt{2} a_0^2 (2+k^2)^2 (a_0 - 33 a_1 k^2)}$	$-\frac{2a_0 + (3a_0 - 56a_1)k^2 + 86a_1k^4}{6a_0(2+k^2)(a_0 - 33a_1k^2)}$	$\frac{i k (54 a_1^2 k^4 (40 + 3 k^2) + a_0^2 (6 + 5 k^2) - 3 a_0 a_1 k^2 (86 + 23 k^2))}{\sqrt{6} a_0^2 (2 + k^2)^2 (a_0 - 33 a_1 k^2)}$
$\Delta_1^{#4} \dagger^{\alpha}$	0	0	0	0	$-\frac{\sqrt{\frac{5}{6}} k^2 (a_0+a_1 (40-31 k^2))}{2 a_0 (2+k^2) (a_0-33 a_1 k^2)}$	$\frac{\sqrt{5} (10 a_0 + k^2 (3 a_0 - 2 a_1 (164 + 31 k^2)))}{12 a_0 (2 + k^2) (a_0 - 33 a_1 k^2)}$	$\frac{1}{12 a_0 - 396 a_1 k^2}$	$\frac{\sqrt{\frac{5}{2}} \left(-2 a_0 + a_1 k^2 \left(164 + 31 k^2\right)\right)}{6 a_0 \left(2 + k^2\right) \left(a_0 - 33 a_1 k^2\right)}$	$-\frac{\sqrt{5}}{6(a_0-33a_1k^2)}$	$-\frac{i\sqrt{\frac{5}{6}}k(a_0-51a_1k^2)}{a_0(2+k^2)(a_0-33a_1k^2)}$
$\Delta_1^{\#5} \dagger^{\alpha}$	0	0	0	$\frac{\sqrt{\frac{2}{3}} k^2}{2 a_0 + a_0 k^2}$	$\frac{k^2 \left(2 a_0^{ 2} \left(5+2 k^2\right)-a_0 a_1 \left(880+778 k^2+199 k^4\right)+a_1^{ 2} k^2 \left(9440+1901 k^2 \left(4+k^2\right)\right)\right)}{2 \sqrt{3} a_0^{ 2} \left(2+k^2\right)^2 \left(a_033 a_1 k^2\right)}$	$\frac{2a_0^2 (-2+k^2) + a_0 a_1 k^2 (472 + 934 k^2 + 289 k^4) - 2a_1^2 k^4 (5120 + 7280 k^2 + 1901 k^4)}{6 \sqrt{2} a_0^2 (2+k^2)^2 (a_0 - 33 a_1 k^2)}$	$\frac{\sqrt{\frac{5}{2}} \left(-2 a_0 + a_1 k^2 \left(164 + 31 k^2\right)\right)}{6 a_0 \left(2 + k^2\right) \left(a_0 - 33 a_1 k^2\right)}$	$\frac{4a_0^2 (17 + 14k^2 + 3k^4) - 4a_0 a_1 k^2 (236 + 287k^2 + 77k^4) + a_1^2 k^4 (5120 + 7280k^2 + 1901k^4)}{6a_0^2 (2 + k^2)^2 (a_0 - 33a_1 k^2)}$	$\frac{1}{3\sqrt{2}a_0(2+k^2)(a_0-33a_1k^2)}$	$\frac{i k (2 a_0^2 (3+k^2)-27 a_1^2 k^4 (40+3 k^2)+3 a_0 a_1 k^2 (34+7 k^2))}{\sqrt{3} a_0^2 (2+k^2)^2 (a_0-33 a_1 k^2)}$
$\Delta_1^{\#6} \uparrow^{\alpha}$	0	0	0	0	$\frac{k^2 \left(-a_0 + a_1 \left(200 + 43 k^2\right)\right)}{\sqrt{6} \ a_0 \left(2 + k^2\right) \left(a_0 - 33 a_1 k^2\right)}$	$-\frac{2 a_0 + (3 a_0 - 56 a_1) k^2 + 86 a_1 k^4}{6 a_0 (2 + k^2) (a_0 - 33 a_1 k^2)}$	$-\frac{\sqrt{5}}{6(a_0-33a_1k^2)}$	$-\frac{a_1 k^2 (28-43 k^2)+2 a_0 (7+3 k^2)}{3 \sqrt{2} a_0 (2+k^2) (a_0-33 a_1 k^2)}$	$\frac{5}{3(a_0-33a_1k^2)}$	$-\frac{i\sqrt{\frac{2}{3}}k(a_0+57a_1k^2)}{a_0(2+k^2)(a_0-33a_1k^2)}$
$\mathcal{T}_{1}^{\#1}\dagger^{lpha}$	0	0	0	$\frac{2i\sqrt{2}k}{2a_0+a_0k^2}$	$\frac{i(-30 a_0 a_1 k^5 + a_0^2 k (4 + k^2) + 27 a_1^2 k^5 (-28 + 3 k^2))}{a_0^2 (2 + k^2)^2 (a_0 - 33 a_1 k^2)}$	$-\frac{i(54a_1^2k^5(40+3k^2)+a_0^2k(6+5k^2)-3a_0a_1k^3(86+23k^2))}{\sqrt{6}a_0^2(2+k^2)^2(a_0-33a_1k^2)}$	$\frac{i\sqrt{\frac{5}{6}} k(a_0-51a_1k^2)}{a_0(2+k^2)(a_0-33a_1k^2)}$	$-\frac{i(2a_0^2k(3+k^2)-27a_1^2k^5(40+3k^2)+3a_0a_1k^3(34+7k^2))}{\sqrt{3}a_0^2(2+k^2)^2(a_0-33a_1k^2)}$	$\frac{i\sqrt{\frac{2}{3}}k(a_0+57a_1k^2)}{a_0(2+k^2)(a_0-33a_1k^2)}$	$\frac{2 k^2 (a_0^2 + 30 a_0 a_1 k^2 - 459 a_1^2 k^4)}{a_0^2 (2 + k^2)^2 (a_0 - 33 a_1 k^2)}$
$\mathcal{T}_{1}^{#_{1}}$ †"	0	0	0				$a_0 (2+k^2) (a_0-33 a_1 k^2)$	$-a(2a_0 + k(3+k) + 2)a_1 + k(4+k) + 3a_0 a_1 + k(3+k) + 3a_0 a$		

Quadratic (free) action
$S == \iiint (\frac{1}{4} (2 a_0 \Gamma_{\alpha}^{\alpha \beta} \Gamma_{\beta \chi}^{\chi} + 4 h^{\alpha \beta} \mathcal{T}_{\alpha \beta} + \Gamma^{\alpha \beta \chi} (-2 a_0 \Gamma_{\beta \chi \alpha} + 4 \Delta_{\alpha \beta \chi}) -$
$a_0 h_{\chi}^{\chi} \partial_{\beta} \Gamma_{\alpha}^{\alpha}{}^{\beta} + a_0 h_{\chi}^{\chi} \partial_{\beta} \Gamma_{\alpha}^{\alpha\beta} - 2 a_0 h_{\alpha\chi} \partial_{\beta} \Gamma^{\alpha\beta\chi} +$
$22a_1\partial^\alpha\Gamma^{\chi\delta}_{\delta}\partial_\beta\Gamma_{\chi\alpha}^{\beta} + 2a_1\partial^\alpha\Gamma_{\chi\alpha}^{\beta}\partial_\beta\Gamma^{\chi\delta}_{\delta} -$
$76 a_1 \partial^{\alpha} \Gamma^{\chi \delta}_{\chi} \partial_{\beta} \Gamma_{\delta \alpha}^{\beta} + 2 a_0 h_{\beta \chi} \partial^{\chi} \Gamma^{\alpha}_{\alpha}^{\beta} -$
$2 a_1 \partial_{\beta} \Gamma_{\chi}^{\ \delta} \partial^{\chi} \Gamma^{\alpha}_{\ \alpha}{}^{\beta} - 2 a_1 \partial_{\beta} \Gamma^{\delta}_{\ \delta\chi} \partial^{\chi} \Gamma^{\alpha}_{\ \alpha}{}^{\beta} +$
$2 a_1 \partial_{\chi} \Gamma_{\beta}^{\ \delta} \partial^{\chi} \Gamma_{\alpha}^{\alpha}^{\beta} - 2 a_1 \partial_{\chi} \Gamma_{\beta\delta}^{\delta} \partial^{\chi} \Gamma_{\alpha}^{\alpha}^{\beta} -$
$2 a_1 \partial_{\chi} \Gamma^{\delta}_{\delta\beta} \partial^{\chi} \Gamma^{\alpha}_{\alpha}{}^{\beta} - 22 a_1 \partial_{\beta} \Gamma^{\delta}_{\chi\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} +$
$38 a_1 \partial_{\beta} \Gamma^{\delta}_{\chi\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} + 22 a_1 \partial_{\chi} \Gamma^{\delta}_{\beta \delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} -$
$2 a_1 \partial_{\chi} \Gamma^{\delta}_{\beta\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} + 4 a_1 \partial_{\alpha} \Gamma^{\delta}_{\chi\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\beta} -$
$4a_1\partial_\chi \Gamma_{\alpha\ \delta}^{\ \delta}\partial^\chi \Gamma^{\alpha\beta}_{\ \beta} - 2a_1\partial_\chi \Gamma^{\alpha\beta\chi}\partial_\delta \Gamma_{\alpha\beta}^{\ \delta} -$
$2a_1\partial_\beta \Gamma^{\alpha\beta\chi}\partial_\delta \Gamma_{\alpha\chi}^{\delta} - 2a_1\partial_\beta \Gamma^{\alpha\beta\chi}\partial_\delta \Gamma_{\alpha\chi}^{\delta} +$
$38 a_1 \partial_{\chi} \Gamma^{\alpha\beta\chi} \partial_{\delta} \Gamma_{\beta\alpha}^{\delta} + 4 a_1 \partial^{\chi} \Gamma^{\alpha}_{\alpha}{}^{\beta} \partial_{\delta} \Gamma_{\beta}^{\alpha}{}^{\delta} -$
$22 a_1 \partial^{\chi} \Gamma^{\alpha\beta}_{\beta} \partial_{\delta} \Gamma_{\chi\alpha}^{\delta} + 2 a_1 \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} \partial_{\delta} \Gamma_{\chi\beta}^{\delta} -$
$2a_1\partial_\beta \Gamma^{\alpha\beta\chi}\partial_\delta \Gamma_{\chi\ \alpha}^{\ \delta} - 2a_1\partial^\chi \Gamma^{\alpha\beta}_{\ \beta}\partial_\delta \Gamma_{\chi\ \alpha}^{\ \delta} +$
$2 a_1 \partial^{\chi} \Gamma_{\beta \alpha}^{ \beta} \partial_{\delta} \Gamma_{\chi}^{ \delta \alpha} + 4 a_1 \partial^{\chi} \Gamma_{\alpha}^{\alpha \beta} \partial_{\delta} \Gamma_{\chi \beta}^{ \delta} -$
$2a_1\partial_\beta\Gamma^\alpha_{\alpha}{}^\beta\partial_\delta\Gamma^\chi_{\chi}{}^\delta + 4a_1\partial_\beta\Gamma^\alpha_{\alpha}{}^\beta\partial_\delta\Gamma^{\chi\delta}_{\chi} -$
$2a_1\partial_\beta \Gamma^{\alpha\beta}_{ \ \alpha}\partial_\delta \Gamma^{\chi\delta}_{ \ \chi} + 2a_1\partial_\alpha \Gamma_{\beta\chi\delta}\partial^\delta \Gamma^{\alpha\beta\chi} +$
$4a_1\partial_\alpha \Gamma_{\beta\delta\chi}\partial^\delta \Gamma^{\alpha\beta\chi} + 4a_1\partial_\alpha \Gamma_{\chi\beta\delta}\partial^\delta \Gamma^{\alpha\beta\chi} +$
$2 a_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + 4 a_1 \partial_{\alpha} \Gamma_{\delta \beta \chi} \partial^{\delta} \Gamma^{\alpha \beta \chi} +$
$4 a_1 \partial_\alpha \Gamma_{\delta \chi \beta} \partial^\delta \Gamma^{\alpha \beta \chi} - 2 a_1 \partial_\beta \Gamma_{\alpha \chi \delta} \partial^\delta \Gamma^{\alpha \beta \chi} -$
$2 a_1 \partial_{\beta} \Gamma_{\alpha\delta\chi} \partial^{\delta} \Gamma^{\alpha\beta\chi} - 2 a_1 \partial_{\beta} \Gamma_{\chi\delta\alpha} \partial^{\delta} \Gamma^{\alpha\beta\chi} -$
$2 a_1 \partial_{\chi} \Gamma_{\alpha\beta\delta} \partial^{\delta} \Gamma^{\alpha\beta\chi} - 2 a_1 \partial_{\chi} \Gamma_{\beta\alpha\delta} \partial^{\delta} \Gamma^{\alpha\beta\chi} +$
$4 a_1 \partial_{\chi} \Gamma_{\beta \delta \alpha} \partial^{\delta} \Gamma^{\alpha \beta \chi} - 4 a_1 \partial_{\delta} \Gamma_{\alpha \beta \chi} \partial^{\delta} \Gamma^{\alpha \beta \chi} - 4 a_1 \partial_{\delta} \Gamma_{\alpha \chi \beta}$
$\partial^{\delta} \Gamma^{\alpha\beta\chi} - 2 a_1 \partial_{\delta} \Gamma_{\beta\alpha\chi} \partial^{\delta} \Gamma^{\alpha\beta\chi} - 2 a_1 \partial_{\delta} \Gamma_{\beta\chi\alpha} \partial^{\delta} \Gamma^{\alpha\beta\chi} -$
$2 a_1 \partial_{\delta} \Gamma_{\chi\beta\alpha} \partial^{\delta} \Gamma^{\alpha\beta\chi} + 2 a_1 \partial_{\beta} \Gamma_{\delta\alpha}^{ \beta} \partial^{\delta} \Gamma^{\chi\alpha}_{ \chi} +$
$2a_1\partial_{\beta}\Gamma_{\delta\alpha}^{ \beta}\partial^{\delta}\Gamma_{\chi}^{\chi\alpha}))[t,x,y,z]dzdydxdt$
г#1 г#2 г#3 , #1 г#1

	$\Gamma^{\#1}_{1^+lphaeta}$	$\Gamma_{1}^{\#2}$ $\alpha\beta$	Γ ^{#3} ₁ + αβ	$\Gamma_{1}^{\#1}{}_{\alpha}$	Γ ₁ - α	Γ# ³ α	Γ ₁ -4 _α	Γ# ⁵ α	Γ# ⁶ 1 α	$h_1^{\#1}{}_{\alpha}$
$\Gamma_{1}^{\#1} \dagger^{\alpha\beta}$	$\frac{1}{4} \left(-a_0 - 15 a_1 k^2 \right)$		$5a_1k^2$	0	0	0	0	0	0	0
$\Gamma_{1}^{\#2} + ^{\alpha\beta}$	$-\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0	0	0	0
$\Gamma_{1}^{#3}$ † $^{\alpha\beta}$	$5a_1k^2$	0	$\frac{1}{4}(a_0-29a_1k^2)$	0	0	0	0	0	0	0
$\Gamma_1^{\#1} \uparrow^{\alpha}$	0	0	0	$\frac{1}{4} \left(-a_0 - 3 a_1 k^2 \right)$	$\frac{a_0}{2\sqrt{2}}$	$\frac{5}{2} \sqrt{3} a_1 k^2$	$-\frac{5}{2}\sqrt{\frac{5}{3}}a_1k^2$	$5\sqrt{\frac{3}{2}}a_1k^2$	$-\frac{5a_1k^2}{\sqrt{3}}$	$-\frac{i a_0 k}{4 \sqrt{2}}$
$\Gamma_1^{#2} \uparrow^{\alpha}$	0	0	0	$\frac{a_0}{2\sqrt{2}}$	0	0	0	0	0	0
$\Gamma_{1}^{#3} \dagger^{\alpha}$	0	0	0	$\frac{5}{2} \sqrt{3} a_1 k^2$	0	- <u>a_0</u> 3	$\frac{1}{6} \sqrt{5} (a_0 - 8 a_1 k^2)$	$-\frac{a_0}{6\sqrt{2}}$	$\frac{1}{6} \left(-a_0 + 20 a_1 k^2 \right)$	<u>ia₀k</u> 4√6
$\Gamma_{1}^{\#4} \uparrow^{\alpha}$	0	0	0	$-\frac{5}{2}\sqrt{\frac{5}{3}}a_1k^2$	0	$\frac{1}{6} \sqrt{5} (a_0 - 8 a_1 k^2)$		$-\frac{1}{6} \sqrt{\frac{5}{2}} (a_0 + 16 a_1 k^2)$	$-\frac{1}{6} \sqrt{5} (a_0 - 5 a_1 k^2)$	$-\frac{1}{4}\bar{l}\sqrt{\frac{5}{6}}a_0k$
$\Gamma_{1}^{\#5} \uparrow^{\alpha}$	0	0	0	$5\sqrt{\frac{3}{2}}a_1k^2$	0	$-\frac{a_0}{6\sqrt{2}}$	$-\frac{1}{6} \sqrt{\frac{5}{2}} (a_0 + 16 a_1 k^2)$	<u>a₀</u> 3	$\frac{a_0 + 40 a_1 k^2}{6 \sqrt{2}}$	$\frac{i a_0 k}{4 \sqrt{3}}$
$\Gamma_1^{\#6} \uparrow^{\alpha}$	0	0	0	$-\frac{5a_1k^2}{\sqrt{3}}$	0	$\frac{1}{6} \left(-a_0 + 20 a_1 k^2 \right)$	$-\frac{1}{6}\sqrt{5}(a_0-5a_1k^2)$	$\frac{a_0 + 40 a_1 k^2}{6 \sqrt{2}}$	$\frac{5}{12} (a_0 - 17 a_1 k^2)$	$\frac{i a_0 k}{4 \sqrt{6}}$
$h_1^{\#1} + ^{\alpha}$	0	0	0	$\frac{i a_0 k}{4 \sqrt{2}}$	0	$-\frac{i a_0 k}{4 \sqrt{6}}$	$\frac{1}{4}\bar{l}\sqrt{\frac{5}{6}}a_0k$	$-\frac{i a_0 k}{4 \sqrt{3}}$	$-\frac{i a_0 k}{4 \sqrt{6}}$	0

	$\Delta_0^{\#1}$	Δ ₀ ^{#2}	$\Delta_0^{\#3}$	$\Delta_0^{\#4}$	${\cal T}_0^{\#1}$	${\mathcal T}_{0}^{ extsf{#2}}$	$\Delta_0^{\#1}$
$\Delta_0^{#1}$ †	0	$\frac{4\sqrt{6}}{16a_0 + 3a_0 k^2}$	$-\frac{4\sqrt{\frac{2}{3}}}{16a_0+3a_0k^2}$	$-\frac{8}{\sqrt{3} (16 a_0 + 3 a_0 k^2)}$	$-\frac{2i\sqrt{2}}{a_0k}$	$-\frac{2i\sqrt{6}k}{16a_0+3a_0k^2}$	0
$\Delta_{0}^{\#2}$ †	$\frac{4\sqrt{6}}{16a_0 + 3a_0 k^2}$	$-\frac{48 (3 a_0 + 197 a_1 k^2)}{a_0^2 (16 + 3 k^2)^2}$	$\frac{16(19a_0 + (3a_0 + 197a_1)k^2)}{a_0^2(16 + 3k^2)^2}$	$-\frac{8\sqrt{2}(10a_0+(3a_0-394a_1)k^2)}{{a_0}^2(16+3k^2)^2}$	$-\frac{8i\sqrt{3}(a_0-65a_1k^2)}{{a_0}^2k(16+3k^2)}$	$\frac{24 i k (3 a_0 + 197 a_1 k^2)}{a_0^2 (16 + 3 k^2)^2}$	0
$\Delta_{0}^{#3}$ †	$-\frac{4\sqrt{\frac{2}{3}}}{16a_0+3a_0k^2}$	$\frac{16(19a_0 + (3a_0 + 197a_1)k^2)}{a_0^2(16 + 3k^2)^2}$	$-\frac{16 \left(35 a_0 + \left(6 a_0 + 197 a_1\right) k^2\right)}{3 a_0^2 \left(16 + 3 k^2\right)^2}$	$-\frac{8\sqrt{2}(22a_0+(3a_0+394a_1)k^2)}{3a_0^2(16+3k^2)^2}$	$\frac{8i(a_0-65a_1k^2)}{\sqrt{3}a_0^2k(16+3k^2)}$	$-\frac{8ik(19a_0+(3a_0+197a_1)k^2)}{{a_0}^2(16+3k^2)^2}$	0
$\Delta_{0}^{\#4}$ †	$-\frac{8}{\sqrt{3} (16 a_0 + 3 a_0 k^2)}$	$-\frac{8\sqrt{2}(10a_0+(3a_0-394a_1)k^2)}{a_0^2(16+3k^2)^2}$	$-\frac{8\sqrt{2}(22a_0+(3a_0+394a_1)k^2)}{3a_0^2(16+3k^2)^2}$	$\frac{32 (13 a_0 + (3 a_0 - 197 a_1) k^2)}{3 a_0^2 (16 + 3 k^2)^2}$	$\frac{8i\sqrt{\frac{2}{3}}(a_0-65a_1k^2)}{a_0^2k(16+3k^2)}$	$\frac{4i\sqrt{2}k(10a_0+(3a_0-394a_1)k^2)}{a_0^2(16+3k^2)^2}$	0
${\cal T}_{0}^{\#1}\dagger$	2 i √2 a ₀ k	$\frac{8i\sqrt{3}(a_0-65a_1k^2)}{a_0^2k(16+3k^2)}$	$-\frac{8i(a_0-65a_1k^2)}{\sqrt{3}a_0^2k(16+3k^2)}$	$-\frac{8i\sqrt{\frac{2}{3}}(a_0-65a_1k^2)}{a_0^2k(16+3k^2)}$	$\frac{4(a_0-25a_1k^2)}{a_0^2k^2}$	$\frac{4\sqrt{3}(a_0-65a_1k^2)}{a_0^2(16+3k^2)}$	0
${\cal T}_{0}^{\#2}\dagger$	$\frac{2 i \sqrt{6} k}{16 a_0 + 3 a_0 k^2}$	$-\frac{24 i k (3 a_0+197 a_1 k^2)}{a_0^2 (16+3 k^2)^2}$	$\frac{8ik(19a_0 + (3a_0 + 197a_1)k^2)}{a_0^2(16 + 3k^2)^2}$	$-\frac{4 i \sqrt{2} k (10 a_0 + (3 a_0 - 394 a_1) k^2)}{a_0^2 (16 + 3 k^2)^2}$	$\frac{4\sqrt{3}(a_0-65a_1k^2)}{a_0^2(16+3k^2)}$	$-\frac{12k^2(3a_0+197a_1k^2)}{{a_0}^2(16+3k^2)^2}$	0
$\Delta_0^{\#1}$ †	0	0	0	0	0	0	$-\frac{2}{a_0-a_1k^2}$
	$\Gamma_{3}^{\#1}_{\alpha\beta\chi}$				Γ _{0.+} *1	Γ#2 Γ ₀₊ Γ#3	Γ#4 0+

_	$\Delta_{2}^{\#1}_{\alpha\beta}$	$\Delta^{\#2}_{2}{}^{+}_{\alpha\beta}$	$\Delta^{#3}_{2}^{+}_{\alpha\beta}$	${\mathcal T}^{\sharp 1}_{2^+lphaeta}$	$\Delta_2^{\#1}_{\alpha\beta\chi}$	$\Delta_2^{#2}_{\alpha\beta\chi}$
$\Delta_{2}^{\#1}\dagger^{lphaeta}$	0	$\frac{2\sqrt{\frac{2}{3}}}{a_0}$	$\frac{4}{\sqrt{3} a_0}$	4 i √2 a ₀ k	0	0
$\Delta_{2^{+}}^{#2}\dagger^{lphaeta}$	$\frac{2\sqrt{\frac{2}{3}}}{a_0}$	$-\frac{8(a_0+13a_1k^2)}{3a_0^2}$	$-\frac{2\sqrt{2}(a_0+52a_1k^2)}{3a_0^2}$	$-\frac{4i(a_0+31a_1k^2)}{\sqrt{3}a_0^2k}$	0	0
$\Delta_{2}^{#3}\dagger^{\alpha\beta}$	$\frac{4}{\sqrt{3} a_0}$	$-\frac{2\sqrt{2}(a_0+52a_1k^2)}{3a_0^2}$	$\frac{8(a_0-26a_1k^2)}{3a_0^2}$	$-\frac{4i\sqrt{\frac{2}{3}}(a_0+31a_1k^2)}{a_0^2k}$	0	0
${\mathcal T}_2^{\sharp 1} \dagger^{lphaeta}$	$-\frac{4i\sqrt{2}}{a_0k}$	$\frac{4i(a_0 + 31a_1k^2)}{\sqrt{3}a_0^2k}$	$\frac{4i\sqrt{\frac{2}{3}}(a_0+31a_1k^2)}{a_0^2k}$	$-\frac{8(a_0+11a_1k^2)}{a_0^2k^2}$	0	0
$\Delta_2^{#1} \dagger^{\alpha\beta\chi}$	0	0	0	0	$\frac{4}{a_0 - a_1 k^2}$	0
$\Delta_2^{\#2} \dagger^{\alpha\beta\chi}$	0	0	0	0	0	$\frac{4}{a_0-5a_1k^2}$
			$\Delta_3^{\#}$			

	$\Gamma^{\#1}_{2^+ lpha eta}$	$\Gamma^{\#2}_{2}{}^{+}{}_{lphaeta}$	Γ ₂ + _{αβ}	$h_{2}^{\#1}_{lphaeta}$	$\Gamma_{2}^{\#1}_{\alpha\beta\chi}$	Γ ₂ - _{αβχ}
$\Gamma_{2}^{\#1} \dagger^{\alpha\beta}$	$\frac{1}{4} (a_0 + 11 a_1 k^2)$	$-5\sqrt{\frac{2}{3}}a_1k^2$	$\frac{5 a_1 k^2}{\sqrt{3}}$	$\frac{i a_0 k}{4 \sqrt{2}}$	0	0
$\Gamma_{2}^{#2} \dagger^{\alpha\beta}$	$-5\sqrt{\frac{2}{3}}a_1k^2$	$\frac{1}{6} \left(-3 a_0 + a_1 k^2 \right)$	$-\frac{a_1 k^2}{6 \sqrt{2}}$	$\frac{i a_0 k}{4 \sqrt{3}}$	0	0
$\Gamma_{2}^{#3} \dagger^{\alpha\beta}$	$\frac{5a_1k^2}{\sqrt{3}}$	$-\frac{a_1 k^2}{6 \sqrt{2}}$	$\frac{1}{12} \left(3 a_0 + a_1 k^2 \right)$	$-\frac{i a_0 k}{4 \sqrt{6}}$	0	0
$h_{2}^{\#1} \dagger^{\alpha\beta}$	$-\frac{i a_0 k}{4 \sqrt{2}}$	$-\frac{i a_0 k}{4 \sqrt{3}}$	$\frac{i a_0 k}{4 \sqrt{6}}$	0	0	0
$\Gamma_2^{\#1} \dagger^{\alpha\beta\chi}$	0	0	0	0	$\frac{1}{4}(a_0-a_1k^2)$	0
$\Gamma_2^{\#2} \dagger^{\alpha\beta\chi}$	0	0	0	0	0	$\frac{1}{4}$ (a ₀ - 5 a ₁ k ²

$\Gamma_3^{#1} + \alpha^{\beta \chi}$	$\frac{1}{3} - \alpha \beta \chi$ $\frac{1}{2} (-a_0 - 7 a_1 k^2)$		
Γ ₂ - _{αβχ}	Source constraints	F. vo do vo o votal fieldo	Naviki ali aiki a
0	SO(3) irreps $2 \mathcal{T}_{0^{+}}^{\#2} - i k \Delta_{0^{+}}^{\#2} == 0$	Fundamental fields $2 \partial_{\beta} \partial_{\alpha} \mathcal{T}^{\alpha\beta} = \partial_{\chi} \partial_{\beta} \partial_{\alpha} \Delta^{\alpha\beta\chi}$	Multiplicities 1
0	$\Delta_{0^{+}}^{\#3} + 2 \Delta_{0^{+}}^{\#4} + 3 \Delta_{0^{+}}^{\#2} == 0$	$\partial_{\alpha} \Delta^{\alpha\beta}_{\beta} == 0$	1
0	$6 \mathcal{T}_{1}^{\#1\alpha} - i k (3 \Delta_{1}^{\#2\alpha} - \Delta_{1}^{\#3\alpha}) = 0$	$2 \partial_{\chi} \partial_{\beta} \partial^{\alpha} \mathcal{T}^{\beta \chi} + \partial_{\delta} \partial^{\delta} \partial_{\chi} \partial_{\beta} \Delta^{\beta \alpha \chi} = $ $2 \partial_{\chi} \partial^{\chi} \partial_{\beta} \mathcal{T}^{\alpha \beta} + \partial_{\delta} \partial_{\chi} \partial_{\beta} \partial^{\alpha} \Delta^{\beta \chi \delta}$	3
0	$\frac{1}{2 \Delta_{1}^{\#6} \alpha + \Delta_{1}^{\#4} \alpha} +$	$\partial_{\beta}\partial^{\alpha}\Delta^{\beta\chi}_{\chi} = \partial_{\chi}\partial^{\chi}\Delta^{\alpha\beta}_{\beta}$	3
0	$2 \Delta_{1}^{\#5\alpha} + \Delta_{1}^{\#3\alpha} == 0$		
$\frac{1}{4} (a_0 - 5 a_1 k^2)$	Total constraints/gauge gener	ators:	8

	Γ ₀ [‡]	Γ ₀ ^{#2}	Γ ₀ ⁺³	Γ ₀ ^{#4}	$h_0^{\#_1}$	$h_{0}^{\#2}$	Γ ₀ -1
Γ ₀ ^{#1} †	$\frac{1}{2} \left(-a_0 + 25 a_1 k^2 \right)$	0	$10\sqrt{\frac{2}{3}}a_1k^2$	$-\frac{10 a_1 k^2}{\sqrt{3}}$	$-\frac{i a_0 k}{2 \sqrt{2}}$	0	0
$\Gamma_{0}^{\#2}$ †	0	0	<u>a₀</u> 2	$-\frac{a_0}{2\sqrt{2}}$	0	0	0
Γ ₀ ^{#3} †	$10\sqrt{\frac{2}{3}}a_1k^2$	<u>a₀</u> 2	$\frac{23a_1k^2}{3}$	$-\frac{3a_0+46a_1k^2}{6\sqrt{2}}$	<u>ia₀k</u> 4√3	$-\frac{1}{4}\bar{l}a_0k$	0
Γ ₀ ^{#4} †	$-\frac{10a_1k^2}{\sqrt{3}}$	$-\frac{a_0}{2\sqrt{2}}$	$-\frac{3a_0+46a_1k^2}{6\sqrt{2}}$	$\frac{1}{6} (3 a_0 + 23 a_1 k^2)$	$-\frac{i a_0 k}{4 \sqrt{6}}$	$\frac{i a_0 k}{4 \sqrt{2}}$	0
$h_{0}^{\#1}$ †	$\frac{i a_0 k}{2 \sqrt{2}}$	0	$-\frac{i a_0 k}{4 \sqrt{3}}$	$\frac{i a_0 k}{4 \sqrt{6}}$	0	0	0
$h_{0}^{\#2}$ †	0	0	<u>i a o k</u> 4	$-\frac{i a_0 k}{4 \sqrt{2}}$	0	0	0
Γ ₀ -1 †	0	0	0	0	0	0	$\frac{1}{2}\left(-a_0+a_1k^2\right)$
		•	_				