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

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

$\frac{11}{2} a_1 \partial_\beta \Gamma_{\delta\alpha}^{ \beta} \partial^\delta \Gamma^{\alpha\chi}_{ \chi} - \frac{1}{2} a_1 \partial^\alpha \Gamma_{\delta\alpha}^{ \beta} \partial^\delta \Gamma_{\beta \ \chi}^{ \chi} + \frac{1}{2} a_1 \partial_\beta \Gamma_{\delta\alpha}^{ \beta} \partial^\delta \Gamma^{\chi\alpha}_{ \chi}$	$a_1\partial_\delta \Gamma_{\alpha\chi\beta}\partial^\delta \Gamma^{\alpha\beta\chi} - \tfrac{1}{2}a_1\partial_\delta \Gamma_{\beta\alpha\chi}\partial^\delta \Gamma^{\alpha\beta\chi} - \tfrac{1}{2}a_1\partial_\delta \Gamma_{\beta\chi\alpha}\partial^\delta \Gamma^{\alpha\beta\chi} - \tfrac{1}{2}a_1\partial_\delta \Gamma_{\chi\beta\alpha}\partial^\delta \Gamma^{\alpha\beta\chi} - \tfrac{1}{2}a_1\partial_\delta \Gamma_{\alpha\beta\gamma}\partial^\delta \Gamma^{\alpha\beta\gamma} - \tfrac{1}{2}a_1\partial_\delta \Gamma^{\alpha\gamma} - \tfrac{1}{2}a_1\partial_\delta \Gamma^{\alpha\gamma} - \tfrac{1}{2}a_1\partial_\delta \Gamma^{\alpha\gamma}$	$\tfrac{1}{2}a_1\partial_\chi\Gamma_{\alpha\beta\delta}\partial^\delta\Gamma^{\alpha\beta\chi} - \tfrac{1}{2}a_1\partial_\chi\Gamma_{\beta\alpha\delta}\partial^\delta\Gamma^{\alpha\beta\chi} + a_1\partial_\chi\Gamma_{\beta\delta\alpha}\partial^\delta\Gamma^{\alpha\beta\chi} - a_1\partial_\delta\Gamma_{\alpha\beta\chi}\partial^\delta\Gamma^{\alpha\beta\chi} - a_1\partial_\delta\Gamma_{\alpha\beta\chi} - a_1\partial_\gamma\Gamma_{\alpha\beta\chi} - a_1\partial_\gamma\Gamma_{\alpha\gamma} - $	$\frac{1}{2}a_1\partial_{\beta}\Gamma_{\alpha\chi\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} - \frac{1}{2}a_1\partial_{\beta}\Gamma_{\alpha\delta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi} - \frac{1}{2}a_1\partial_{\beta}\Gamma_{\chi\delta\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi} -$	$a_1\partial_\alpha \Gamma_{\chi\beta\delta}\partial^\delta \Gamma^{\alpha\beta\chi} + \tfrac{1}{2}a_1\partial_\alpha \Gamma_{\chi\delta\beta}\partial^\delta \Gamma^{\alpha\beta\chi} + a_1\partial_\alpha \Gamma_{\delta\beta\chi}\partial^\delta \Gamma^{\alpha\beta\chi} + a_1\partial_\alpha \Gamma_{\delta\chi\beta}\partial^\delta \Gamma^{\alpha\beta\chi} -$	$\tfrac{1}{2}a_1\partial_\beta\Gamma^{\alpha\beta}_{\alpha}\partial_\delta\Gamma^{\chi\delta}_{\lambda} + \tfrac{1}{2}a_1\partial_\alpha\Gamma_{\beta\chi\delta}\partial^\delta\Gamma^{\alpha\beta\chi} + a_1\partial_\alpha\Gamma_{\beta\delta\chi}\partial^\delta\Gamma^{\alpha\beta\chi} +$	$\tfrac{1}{2} a_1 \partial^\chi \Gamma_{\beta\alpha}^{\alpha} \partial_\delta \Gamma_{}^{\delta\alpha} + a_1 \partial^\chi \Gamma^\alpha_{\alpha}^{\beta} \partial_\delta \Gamma_{\beta}^{\delta} - \tfrac{1}{2} a_1 \partial_\beta \Gamma^\alpha_{\alpha}^{\beta} \partial_\delta \Gamma^\chi_{\delta}^{\delta} + a_1 \partial_\beta \Gamma^\alpha_{\alpha}^{\beta} \partial_\delta \Gamma^{\chi\delta}_{\lambda}^{\delta} -$	$\tfrac{1}{2} a_1 \partial^\chi \Gamma^\alpha_{\ \alpha}{}^\beta \partial_\delta \Gamma_{\chi\beta}{}^\delta + \tfrac{1}{2} a_1 \partial^\chi \Gamma^{\alpha\beta}_{\ \alpha} \partial_\delta \Gamma_{\chi\beta}{}^\delta - \tfrac{1}{2} a_1 \partial_\beta \Gamma^{\alpha\beta\chi} \partial_\delta \Gamma_{\chi}{}^\delta +$	$\tfrac{1}{2}a_1\partial_\beta\Gamma^{\alpha\beta\chi}\partial_\delta\Gamma_{\alpha}^{}{}_{\chi} + \tfrac{19}{2}a_1\partial_\chi\Gamma^{\alpha\beta\chi}\partial_\delta\Gamma_{\beta\alpha}^{\zeta} + a_1\partial^\chi\Gamma^{\alpha}_{\alpha}^{\beta}\partial_\delta\Gamma_{\beta}^{\chi} +$	$a_1\partial_\alpha \Gamma_{\chi}^{\delta}\partial^\chi \Gamma^{\alpha\beta}_{\beta} - a_1\partial_\chi \Gamma_{\alpha}^{\delta}\partial^\chi \Gamma^{\alpha\beta}_{\beta} - \tfrac{1}{2}a_1\partial_\chi \Gamma^{\alpha\beta\chi}\partial_\delta \Gamma_{\alpha\beta}^{\delta} - \tfrac{1}{2}a_1\partial_\beta \Gamma^{\alpha\beta\chi}\partial_\delta \Gamma_{\alpha\chi}^{\delta} -$	$\frac{\frac{19}{2}}{a_1} \partial_{\beta} \Gamma^{\delta}_{\chi\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} + \frac{11}{2} a_1 \partial_{\chi} \Gamma_{\beta\delta}^{\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} - \frac{1}{2} a_1 \partial_{\chi} \Gamma^{\delta}_{\beta\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} +$	$\tfrac{1}{2} a_1 \partial_\chi \Gamma^\delta_{\beta\delta} \partial^\chi \Gamma^\alpha_{\alpha}{}^\beta - \tfrac{1}{2} a_1 \partial_\chi \Gamma^\delta_{\delta\beta} \partial^\chi \Gamma^\alpha_{\alpha}{}^\beta - \tfrac{11}{2} a_1 \partial_\beta \Gamma_\chi^{\delta}_{\delta} \partial^\chi \Gamma^{\alpha\beta}_{\alpha} +$	$\frac{1}{2}a_1\partial_{\beta}\Gamma_{\chi}^{\delta}\partial^{\chi}\Gamma_{\alpha}^{\beta} - \frac{1}{2}a_1\partial_{\beta}\Gamma_{\delta\chi}^{}\partial^{\chi}\Gamma_{\alpha}^{\beta} + \frac{1}{2}a_1\partial_{\chi}\Gamma_{\delta}^{\delta}\partial^{\chi}\Gamma_{\alpha}^{\beta} -$	$\frac{1}{2}a_1\partial^\alpha\Gamma_{\chi\alpha}^{\beta}\partial_\beta\Gamma^{\chi\delta}_{\delta}-19a_1\partial^\alpha\Gamma^{\chi\delta}_{\chi}\partial_\beta\Gamma_{\delta\alpha}^{\beta}+\frac{1}{2}a_0\;h_{\beta\chi}\partial^\chi\Gamma^\alpha_{\alpha}^{\beta}-$	$\frac{1}{4}a_0\;h^\chi_{\;\chi}\partial_\beta\Gamma^\alpha_{\;\;\alpha}{}^\beta+\frac{1}{4}a_0\;h^\chi_{\;\chi}\partial_\beta\Gamma^{\alpha\beta}_{\;\;\alpha}-\frac{1}{2}a_0\;h_{\alpha\chi}\partial_\beta\Gamma^{\alpha\beta\chi}+\frac{11}{2}a_1\partial^\alpha\Gamma^{\chi\delta}_{\;\;\delta}\partial_\beta\Gamma_{\;\chi\alpha}{}^\beta+$	$-\frac{1}{2}a_0\Gamma^{\alpha\beta\chi}\Gamma_{\beta\chi\alpha}+\frac{1}{2}a_0\Gamma^{\alpha\beta}_{\alpha}\Gamma^{\chi}_{\beta\chi}+h^{\alpha\beta}\mathcal{T}_{\alpha\beta}+\Gamma^{\alpha\beta\chi}\Delta_{\alpha\beta\chi}-$	Lagrangian density

Γ ₀ -1 †	$h_{0+}^{#2}$ †	$h_{0+}^{#1}$ †	Γ ₀ ^{#4} †	Γ ₀ ^{#3} †	Γ ₀ ^{#2} †	Γ ₀ ^{#1} †	
0	0	$\frac{i a_0 k}{2 \sqrt{2}}$	$-\frac{10a_1k^2}{\sqrt{3}}$	$+$ 10 $\sqrt{\frac{2}{3}} a_1 k^2$	0	$\frac{1}{2}\left(-a_0+25a_1k^2\right)$	Γ ₀ ^{#1}
0	0	0	$\frac{a_0}{2\sqrt{2}}$	$\frac{a_0}{2}$	0	0	Γ ₀ ^{#2}
0	$\frac{\sqrt{a_0 k}}{4}$	$-\frac{ia_0k}{4\sqrt{3}}$	$-\frac{3a_0+46a_1k^2}{6\sqrt{2}}$	23 <i>a</i> 1 k ² 3	2 2	$10\sqrt{\frac{2}{3}}a_1k^2$	Γ ₀ ^{#3}
0	$-\frac{i a_0 k}{4 \sqrt{2}}$	$\frac{i a_0 k}{4 \sqrt{6}}$	$\frac{1}{6} (3 a_0 + 23 a_1 k^2)$	$-\frac{3a_0+46a_1k^2}{6\sqrt{2}}$	$-\frac{a_0}{2\sqrt{2}}$	$a_1 k^2$ $-\frac{10 a_1 k^2}{\sqrt{3}}$ $-\frac{i a_0 k}{2 \sqrt{2}}$	Γ ₀ ^{#4}
0	0	0	$-\frac{ia_0k}{4\sqrt{6}}$	$\frac{i a_0 k}{4 \sqrt{3}}$	0	$-\frac{ia_0k}{2\sqrt{2}}$	$h_{0+}^{\#1}$
0	0	0	$\frac{i a_0 k}{4 \sqrt{2}}$	$-\frac{1}{4}ia_0k$	0	0	$h_{0+}^{#2}$
$\frac{1}{2} \left(-a_0 + a_1 k^2 \right)$	0	0	0	0	0	0	Γ #1

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

$\Delta_{0}^{#1}$ †	T ₀ ^{#2} †	${\cal T}_{0}^{\#1} \dagger$	$\Delta_{0}^{\#4}$ †	Δ ₀ ^{#3} †	$\Delta_{0}^{#2}$ †	$\Delta_{0}^{#1}$ †	
0	$\frac{2i\sqrt{6}k}{16a_0 + 3a_0k^2}$	2 i √2 a0 k	$-\frac{8}{\sqrt{3}(16a_0+3a_0k^2)}$	$-\frac{4\sqrt{\frac{2}{3}}}{16a_0+3a_0k^2}$	$\frac{4\sqrt{6}}{16a_0 + 3a_0 k^2}$	0	$\Delta_0^{\#1}$
0	$-\frac{24 i k (3 a_0 + 197 a_1 k^2)}{a_0^2 (16 + 3 k^2)^2}$	$\frac{8i\sqrt{3}(a_0-65a_1k^2)}{a_0^2k(16+3k^2)}$	$-\frac{8\sqrt{2}(10a_0+(3a_0-394a_1)k^2)}{{a_0}^2(16+3k^2)^2}$	$\frac{16(19a_0 + (3a_0 + 197a_1)k^2)}{a_0^2(16 + 3k^2)^2}$	$-\frac{48 (3 a_0 + 197 a_1 k^2)}{a_0^2 (16 + 3 k^2)^2}$	$\frac{4\sqrt{6}}{16a_0 + 3a_0 k^2}$	$\Delta_0^{\#2}$
0	$\frac{8ik(19a_0 + (3a_0 + 197a_1)k^2)}{{a_0}^2(16 + 3k^2)^2}$	$-\frac{8i(a_0-65a_1k^2)}{\sqrt{3}a_0^2k(16+3k^2)}$	$-\frac{8\sqrt{2}(22a_0+(3a_0+394a_1)k^2)}{3a_0^2(16+3k^2)^2}$	$-\frac{16(35a_0+(6a_0+197a_1)k^2)}{3a_0^2(16+3k^2)^2}$	$\frac{16(19a_0 + (3a_0 + 197a_1)k^2)}{a_0^2(16 + 3k^2)^2}$	$-\frac{4\sqrt{\frac{2}{3}}}{16a_0+3a_0k^2}$	$\Delta_0^{\#3}$
0	$-\frac{4i\sqrt{2}k(10a_0+(3a_0-394a_1)k^2)}{a_0^2(16+3k^2)^2}$	$-\frac{8i\sqrt{\frac{2}{3}}(a_0-65a_1k^2)}{a_0^2k(16+3k^2)}$	$\frac{32(13a_0 + (3a_0 - 197a_1)k^2)}{3a_0^2(16 + 3k^2)^2}$	$-\frac{8\sqrt{2}(22a_0+(3a_0+394a_1)k^2)}{3a_0^2(16+3k^2)^2}$	$-\frac{8\sqrt{2}(10a_0+(3a_0-394a_1)k^2)}{a_0^2(16+3k^2)^2}$	$-\frac{8}{\sqrt{3}(16a_0+3a_0k^2)}$	$\Delta_0^{\#4}$
0	$\frac{4\sqrt{3}(a_0-65a_1k^2)}{a_0^2(16+3k^2)}$	$\frac{4(a_0-25a_1k^2)}{a_0^2k^2}$	$\frac{8i\sqrt{\frac{2}{3}}(a_0-65a_1k^2)}{a_0^2k(16+3k^2)}$	$\frac{8i(a_0-65a_1k^2)}{\sqrt{3}a_0^2k(16+3k^2)}$	$-\frac{8i\sqrt{3}(a_0-65a_1k^2)}{a_0^2k(16+3k^2)}$	$-\frac{2i\sqrt{2}}{a_0k}$	${\mathcal T}_{0^+}^{\#1}$
0	$-\frac{12 k^2 (3 a_0 + 197 a_1 k^2)}{a_0^2 (16 + 3 k^2)^2}$	$\frac{4\sqrt{3}(a_0-65a_1k^2)}{a_0^2(16+3k^2)}$	$\frac{4i\sqrt{2}k(10a_0+(3a_0-394a_1)k^2)}{{a_0}^2(16+3k^2)^2}$	$-\frac{8ik(19a_0+(3a_0+197a_1)k^2)}{{a_0}^2(16+3k^2)^2}$	$\frac{24ik(3a_0+197a_1k^2)}{a_0^2(16+3k^2)^2}$	$-\frac{2i\sqrt{6}k}{16a_0+3a_0k^2}$	${\mathcal T}_{0^+}^{\#2}$
$-\frac{2}{a_0 \cdot a_1 k^2}$	0	0	0	0	0	0	$\Delta_{0^{-}}^{\#1}$

	$\Delta_{2}^{\#1}{}_{lphaeta}$	$\Delta^{\#2}_{2^+lphaeta}$	$\Delta^{\#3}_{2}^{+}{}_{lphaeta}$	${\cal T}^{\sharp 1}_{2^+lphaeta}$	$\Delta_{2}^{\#1}{}_{\alpha\beta\chi}$	$\Delta_{2-\alpha\beta\chi}^{\#2}$
$\Delta_{2}^{#1} \dagger^{\alpha\beta}$	0	$\frac{2\sqrt{\frac{2}{3}}}{a_0}$	$\frac{4}{\sqrt{3} \ a_0}$	4 i √2 a ₀ k	0	0
$\Delta_{2}^{#2} \dagger^{\alpha\beta}$	$\frac{2\sqrt{\frac{2}{3}}}{a_0}$	$-\frac{8(a_0+13a_1k^2)}{3a_0^2}$	$-\frac{2\sqrt{2}(a_0+52a_1k^2)}{3a_0^2}$	$-\frac{4\bar{\imath}(a_0+31a_1k^2)}{\sqrt{3}a_0^2k}$	0	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	$\frac{4}{a_0-5a_1k^2}$

$\Gamma_{2^{-}}^{#2} + \alpha \beta \chi$	$\Gamma_{2^{-}}^{#1} \uparrow^{\alpha\beta\chi}$	$h_{2+}^{#1} \dagger^{\alpha\beta}$	$\Gamma_{2}^{#3} \dagger^{\alpha\beta}$	$\Gamma_{2+}^{#2} + \alpha \beta$	$\Gamma_{2+}^{#1} \dagger^{\alpha\beta}$	
0	0	$-\frac{ia_0k}{4\sqrt{2}}$	$\frac{5a_1k^2}{\sqrt{3}}$	$-5\sqrt{\frac{2}{3}}a_1k^2$	$\uparrow^{\alpha\beta} \left[\frac{1}{4} \left(a_0 + 11 a_1 k^2 \right) \right]$	$\Gamma_{2}^{\#1}{}_{lphaeta}$
0	0	$-\frac{ia_0k}{4\sqrt{3}}$	$-\frac{a_1 k^2}{6 \sqrt{2}}$	$\frac{1}{6} \left(-3 a_0 + a_1 k^2 \right)$	$-5\sqrt{\frac{2}{3}}a_1k^2$	$\Gamma_{2}^{\#2}$
0	0	$\frac{i a_0 k}{4 \sqrt{6}}$	$\frac{1}{12} (3 a_0 + a_1 k^2)$	$-\frac{a_1 k^2}{6 \sqrt{2}}$	$\frac{5a_1k^2}{\sqrt{3}}$	$\Gamma_{2}^{#3} + \alpha \beta$
0	0	0	$-\frac{ia_0k}{4\sqrt{6}}$	$\frac{i a_0 k}{4 \sqrt{3}}$	$\frac{i a_0 k}{4 \sqrt{2}}$	$h_{2}^{\#1}\alpha\beta$
0	$\frac{1}{4} (a_0 - a_1 k^2)$	0	0	0	0	$\Gamma_{2^-}^{\#1} \alpha \beta \chi$
$\frac{1}{4}(a_0-5a_1k^2)$	0	0	0	0	0	$\Gamma_{2^-}^{\#2} lpha eta \chi$

$\Gamma_{3}^{\sharp 1}{}_{lphaeta\chi}$	$\Delta_{3}^{\#1}{}_{\alpha\beta\chi}$
$\Gamma_3^{\#1} + \alpha\beta\chi$ $\frac{1}{2} (-a_0 - 7 a_1 k^2)$	$\Delta_3^{\#1} + \alpha \beta \chi \left[-\frac{2}{a_0 + 7 a_1 k} \right]$

Unitarity conditions	** MassiveAnalysisOfSector