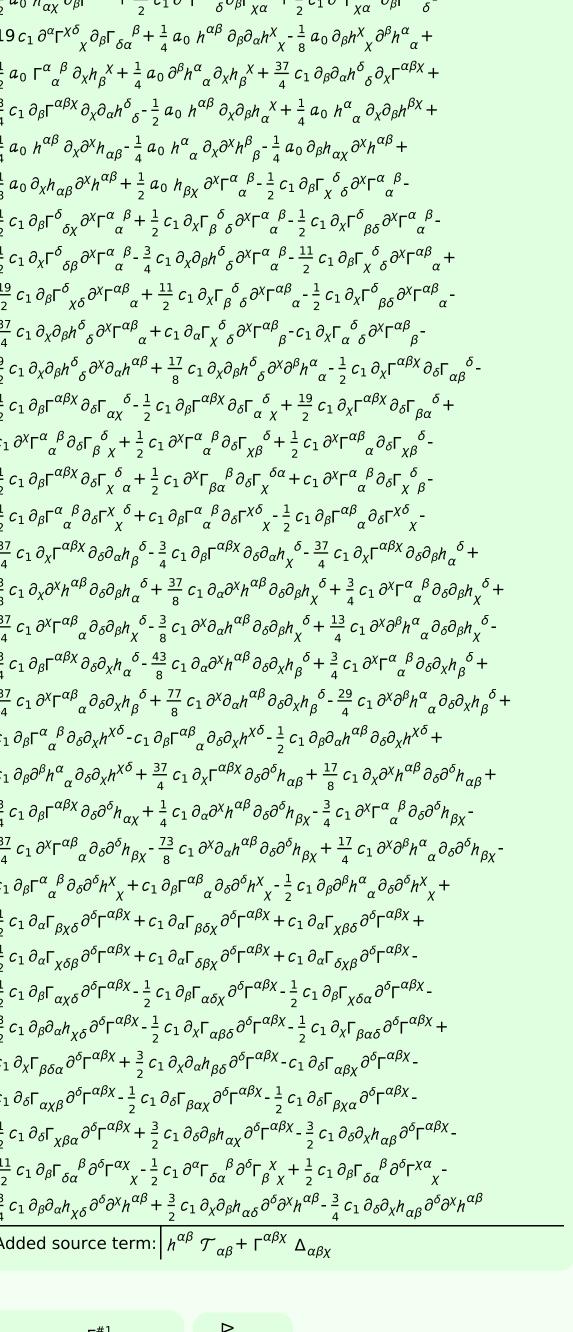
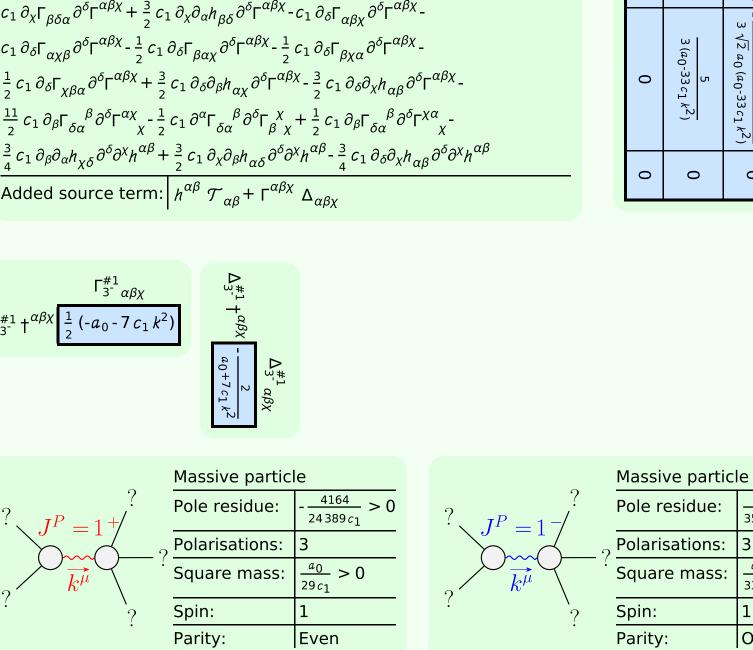
Lagrangian density
$-\frac{1}{2} a_0 \Gamma^{\alpha\beta\chi} \Gamma_{\beta\chi\alpha} + \frac{1}{2} a_0 \Gamma^{\alpha\beta}_{\alpha} \Gamma^{\chi}_{\beta\chi} - \frac{1}{2} a_0 \Gamma^{\alpha\beta\chi} \partial_{\beta} h_{\alpha\chi} -$
$\frac{1}{4} a_0 \Gamma^{\alpha}_{\alpha}{}^{\beta} \partial_{\beta} h^{\chi}_{\chi} + \frac{1}{4} a_0 \Gamma^{\alpha\beta}_{\alpha} \partial_{\beta} h^{\chi}_{\chi} - \frac{1}{4} a_0 h^{\chi}_{\chi} \partial_{\beta} \Gamma^{\alpha}_{\alpha}{}^{\beta} + \frac{1}{4} a_0 h^{\chi}_{\chi} \partial_{\beta} \Gamma^{\alpha\beta}_{\alpha} -$
$\frac{1}{2} a_0 h_{\alpha \chi} \partial_{\beta} \Gamma^{\alpha \beta \chi} + \frac{11}{2} c_1 \partial^{\alpha} \Gamma^{\chi \delta}{}_{\delta} \partial_{\beta} \Gamma_{\chi \alpha}{}^{\beta} + \frac{1}{2} c_1 \partial^{\alpha} \Gamma_{\chi \alpha}{}^{\beta} \partial_{\beta} \Gamma^{\chi \delta}{}_{\delta} -$
$19 c_1 \partial^{\alpha} \Gamma^{\chi \delta}_{\chi} \partial_{\beta} \Gamma_{\delta \alpha}^{\beta} + \frac{1}{4} a_0 h^{\alpha \beta} \partial_{\beta} \partial_{\alpha} h^{\chi}_{\chi} - \frac{1}{8} a_0 \partial_{\beta} h^{\chi}_{\chi} \partial^{\beta} h^{\alpha}_{\alpha} +$
$\frac{1}{2} a_0 \Gamma^{\alpha}_{\alpha}^{\beta} \partial_{\chi} h_{\beta}^{\chi} + \frac{1}{4} a_0 \partial^{\beta} h^{\alpha}_{\alpha} \partial_{\chi} h_{\beta}^{\chi} + \frac{37}{4} c_1 \partial_{\beta} \partial_{\alpha} h^{\delta}_{\delta} \partial_{\chi} \Gamma^{\alpha\beta\chi} +$
$\frac{3}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\chi}\partial_{\alpha}h^{\delta}_{\delta} - \frac{1}{2}a_0h^{\alpha\beta}\partial_{\chi}\partial_{\beta}h^{\chi}_{\alpha} + \frac{1}{4}a_0h^{\alpha}_{\alpha}\partial_{\chi}\partial_{\beta}h^{\beta\chi} +$
$\frac{1}{4} a_0 h^{\alpha\beta} \partial_{\chi} \partial^{\chi} h_{\alpha\beta} - \frac{1}{4} a_0 h^{\alpha}_{\alpha} \partial_{\chi} \partial^{\chi} h^{\beta}_{\beta} - \frac{1}{4} a_0 \partial_{\beta} h_{\alpha\chi} \partial^{\chi} h^{\alpha\beta} +$
$\frac{1}{8} a_0 \partial_{\chi} h_{\alpha\beta} \partial^{\chi} h^{\alpha\beta} + \frac{1}{2} a_0 h_{\beta\chi} \partial^{\chi} \Gamma^{\alpha}_{\alpha}{}^{\beta} - \frac{1}{2} c_1 \partial_{\beta} \Gamma^{\delta}_{\chi} \partial^{\chi} \Gamma^{\alpha}_{\alpha}{}^{\beta} -$
$\frac{1}{2} c_1 \partial_{\beta} \Gamma^{\delta}_{\ \delta \chi} \partial^{\chi} \Gamma^{\alpha}_{\ \alpha}^{\ \beta} + \frac{1}{2} c_1 \partial_{\chi} \Gamma^{\delta}_{\beta \ \delta} \partial^{\chi} \Gamma^{\alpha}_{\ \alpha}^{\ \beta} - \frac{1}{2} c_1 \partial_{\chi} \Gamma^{\delta}_{\ \beta \delta} \partial^{\chi} \Gamma^{\alpha}_{\ \alpha}^{\ \beta} -$
$\frac{1}{2} c_1 \partial_{\chi} \Gamma^{\delta}_{\beta} \partial^{\chi} \Gamma^{\alpha}_{\beta} - \frac{3}{4} c_1 \partial_{\chi} \partial_{\beta} h^{\delta}_{\delta} \partial^{\chi} \Gamma^{\alpha}_{\beta} - \frac{11}{2} c_1 \partial_{\beta} \Gamma^{\delta}_{\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} +$
$\frac{19}{2} c_1 \partial_{\beta} \Gamma^{\delta}_{\chi\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} + \frac{11}{2} c_1 \partial_{\chi} \Gamma^{\delta}_{\beta\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} - \frac{1}{2} c_1 \partial_{\chi} \Gamma^{\delta}_{\alpha} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} - \frac{1}{2} c_1 \partial_{\chi} \Gamma^{\delta}_{\alpha} \partial^{\chi} \Gamma^{\delta}_{\alpha} - \frac{1}{2} c_1 \partial_{\chi} \Gamma^{\delta}_{\alpha} \partial^{\chi}_{$
$\frac{37}{4} c_1 \partial_{\chi} \partial_{\beta} h^{\delta}_{\delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} + c_1 \partial_{\alpha} \Gamma^{\delta}_{\chi \delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\beta} - c_1 \partial_{\chi} \Gamma^{\delta}_{\alpha \delta} \partial^{\chi} \Gamma^{\alpha\beta}_{\beta} - c_1 \partial_{\gamma} \Gamma^{\delta}_{\alpha \delta} \partial^{\chi} \Gamma^{\delta}_{\alpha \delta} \partial^{\chi} \Gamma^{\delta}_{\beta} \partial^{\chi} \Gamma^{\delta}_{\alpha \delta} \partial^{\chi}_{\alpha \delta} \partial^{\chi} \Gamma^{\delta}_{\alpha \delta} \partial^{\chi}_{\alpha \delta} \partial^$
$\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^{\lambda}_{} - \frac{1}{2}c_{1}\partial_{\chi}\Gamma^{\alpha\beta}\partial_{\delta}\Gamma^{\lambda}_{} - \frac{1}{2}c_{1}\partial_{\chi}\Gamma^{\alpha\beta}\partial_{\lambda}\Gamma^{\lambda}_{} - $
$\frac{1}{2} c_1 \partial_{\beta} \Gamma^{\alpha\beta\chi} \partial_{\delta} \Gamma_{\alpha\chi}^{ \delta} - \frac{1}{2} c_1 \partial_{\beta} \Gamma^{\alpha\beta\chi} \partial_{\delta} \Gamma_{\alpha \chi}^{ \delta} + \frac{19}{2} c_1 \partial_{\chi} \Gamma^{\alpha\beta\chi} \partial_{\delta} \Gamma_{\beta\alpha}^{ \delta} +$
$c_1 \partial^{\chi} \Gamma^{\alpha}_{\alpha}{}^{\beta} \partial_{\delta} \Gamma^{\delta}_{\beta}{}_{\chi} + \frac{1}{2} c_1 \partial^{\chi} \Gamma^{\alpha}_{\alpha}{}^{\beta} \partial_{\delta} \Gamma^{\delta}_{\chi\beta} + \frac{1}{2} c_1 \partial^{\chi} \Gamma^{\alpha\beta}_{\alpha} \partial_{\delta} \Gamma^{\delta}_{\chi\beta} -$
$\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\Gamma_{\chi\alpha}^{\delta} + \frac{1}{2}c_1\partial^{\chi}\Gamma_{\beta\alpha}^{\beta}\partial_{\delta}\Gamma_{\chi}^{\delta\alpha} + c_1\partial^{\chi}\Gamma_{\alpha\alpha}^{\alpha\beta}\partial_{\delta}\Gamma_{\chi\beta}^{\delta} -$
$\frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\Gamma^{\chi}_{\chi}{}^{\delta} + c_1\partial_{\beta}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\Gamma^{\chi\delta}_{\chi} - \frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\beta}_{\alpha}\partial_{\delta}\Gamma^{\chi\delta}_{\chi} -$
$\frac{37}{4} c_1 \partial_{\chi} \Gamma^{\alpha\beta\chi} \partial_{\delta} \partial_{\alpha} h_{\beta}^{\ \delta} - \frac{3}{4} c_1 \partial_{\beta} \Gamma^{\alpha\beta\chi} \partial_{\delta} \partial_{\alpha} h_{\chi}^{\ \delta} - \frac{37}{4} c_1 \partial_{\chi} \Gamma^{\alpha\beta\chi} \partial_{\delta} \partial_{\beta} h_{\alpha}^{\ \delta} +$
$\frac{3}{8}c_{1}\partial_{\chi}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\alpha}^{\ \delta} + \frac{37}{8}c_{1}\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\beta}h_{\chi}^{\ \delta} + \frac{3}{4}c_{1}\partial^{\chi}\Gamma^{\alpha}_{\ \alpha}{}^{\beta}\partial_{\delta}\partial_{\beta}h_{\chi}^{\ \delta} +$
$\frac{37}{4} c_1 \partial^{\chi} \Gamma^{\alpha\beta}{}_{\alpha} \partial_{\delta} \partial_{\beta} h_{\chi}^{\delta} - \frac{3}{8} c_1 \partial^{\chi} \partial_{\alpha} h^{\alpha\beta} \partial_{\delta} \partial_{\beta} h_{\chi}^{\delta} + \frac{13}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial_{\delta} \partial_{\beta} h_{\chi}^{\delta} -$
$\frac{3}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial_{\chi}h_{\alpha}^{\delta} - \frac{43}{8}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h_{\beta}^{\delta} + \frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\partial_{\chi}h_{\beta}^{\delta} +$
$\frac{37}{4}c_1\partial^{\chi}\Gamma^{\alpha\beta}_{\alpha}\partial_{\delta}\partial_{\chi}h_{\beta}^{\delta} + \frac{77}{8}c_1\partial^{\chi}\partial_{\alpha}h^{\alpha\beta}\partial_{\delta}\partial_{\chi}h_{\beta}^{\delta} - \frac{29}{4}c_1\partial^{\chi}\partial^{\beta}h^{\alpha}_{\alpha}\partial_{\delta}\partial_{\chi}h_{\beta}^{\delta} +$
$c_{1} \partial_{\beta} \Gamma^{\alpha}_{\alpha}{}^{\beta} \partial_{\delta} \partial_{\chi} h^{\chi \delta} - c_{1} \partial_{\beta} \Gamma^{\alpha \beta}_{\alpha} \partial_{\delta} \partial_{\chi} h^{\chi \delta} - \frac{1}{2} c_{1} \partial_{\beta} \partial_{\alpha} h^{\alpha \beta} \partial_{\delta} \partial_{\chi} h^{\chi \delta} +$
$c_{1} \partial_{\beta} \partial^{\beta} h^{\alpha}_{\ \alpha} \partial_{\delta} \partial_{\chi} h^{\chi \delta} + \frac{37}{4} c_{1} \partial_{\chi} \Gamma^{\alpha \beta \chi} \partial_{\delta} \partial^{\delta} h_{\alpha \beta} + \frac{17}{8} c_{1} \partial_{\chi} \partial^{\chi} h^{\alpha \beta} \partial_{\delta} \partial^{\delta} h_{\alpha \beta} +$
$\frac{3}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} + \frac{1}{4}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} - \frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} -$ $\frac{37}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} + \frac{1}{4}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} - \frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} -$ $\frac{37}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} + \frac{1}{4}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} - \frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} -$ $\frac{37}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} + \frac{1}{4}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} - \frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} -$ $\frac{37}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta\chi}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} + \frac{1}{4}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} - \frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} -$ $\frac{37}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} + \frac{1}{4}c_1\partial_{\alpha}\partial^{\chi}h^{\alpha\beta}\partial_{\delta}\partial^{\delta}h_{\beta\chi} - \frac{3}{4}c_1\partial^{\chi}\Gamma^{\alpha}_{\alpha}{}^{\beta}\partial_{\delta}\partial^{\delta}h_{\alpha\chi} -$ $\frac{37}{4}c_1\partial_{\beta}\Gamma^{\alpha\beta}\partial_{\gamma}\partial^{\gamma}h_{\alpha\chi} - \frac{3}{4}c_1\partial_{\gamma}\Gamma^{\alpha}\partial_{\gamma}h_{\alpha\chi} - \frac{3}{4}c_1\partial_{\gamma}\Gamma^{\alpha}\partial_{\gamma}h_{\alpha\chi} - \frac{3}{4}c_1\partial_{\gamma}\Gamma^{\alpha}\partial_{\gamma}h_{\alpha\chi} -$ $\frac{37}{4}c_1\partial_{\gamma}\Gamma^{\alpha\beta}\partial_{\gamma}\partial_{\gamma}h_{\alpha\chi} - \frac{3}{4}c_1\partial_{\gamma}\Gamma^{\alpha}\partial_{\gamma}h_{\alpha\chi} -$ $\frac{37}{4}c_1\partial_{\gamma}\Gamma^{\alpha}\partial_{\gamma}h_{\alpha\chi} -$ $\frac{37}{4}c_1\partial_{\gamma}H_{\alpha\chi} -$ $\frac{37}{4$
$\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} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial_{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial_{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial_{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial_{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial_{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} h_{\beta\chi} - \frac{1}{4} c_1 \partial^{\chi} \partial^{\beta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^{\delta} \partial^{\delta} \partial^{\delta} h^{\alpha}{}_{\alpha} \partial^{\delta} \partial^$
$c_{1} \partial_{\beta} \Gamma^{\alpha}_{\alpha}{}^{\beta} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} + c_{1} \partial_{\beta} \Gamma^{\alpha\beta}_{\alpha} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} - \frac{1}{2} c_{1} \partial_{\beta} \partial^{\beta} h^{\alpha}_{\alpha} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} +$ $c_{1} \partial_{\beta} \Gamma^{\alpha}_{\alpha}{}^{\beta} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} + c_{1} \partial_{\beta} \Gamma^{\alpha\beta}_{\alpha} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} + c_{2} \partial_{\beta} \Gamma^{\alpha\beta}_{\alpha} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} + c_{3} \partial_{\beta} \Gamma^{\alpha\beta}_{\alpha} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} + c_{4} \partial_{\beta} \Gamma^{\alpha\beta}_{\alpha} \partial_{\delta} \partial^{\delta} h^{\chi}_{\chi} + c_{5} \partial_{\delta} \partial^$
$\frac{1}{2}c_1\partial_{\alpha}\Gamma_{\beta\chi\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} + c_1\partial_{\alpha}\Gamma_{\beta\delta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi} + c_1\partial_{\alpha}\Gamma_{\chi\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} +$ $\frac{1}{2}c_1\partial_{\alpha}\Gamma_{\beta\chi\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} + c_1\partial_{\alpha}\Gamma_{\beta\delta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi} + c_1\partial_{\alpha}\Gamma_{\chi\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} +$
$\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \beta \chi} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \chi \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \beta \chi} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \chi \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \beta \chi} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \chi \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \beta \chi} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \chi \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \beta \chi} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \chi \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} + c_1 \partial_{\alpha} \Gamma_{\delta \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \beta} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \beta \chi} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma_{\chi \delta \gamma} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma^{\alpha \gamma \lambda} \partial^{\delta} \Gamma^{\alpha \gamma \lambda} -$ $\frac{1}{2} c_1 \partial_{\alpha} \Gamma^{\alpha \gamma$
$\frac{1}{2}c_1\partial_{\beta}\Gamma_{\alpha\chi\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} - \frac{1}{2}c_1\partial_{\beta}\Gamma_{\alpha\delta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi} - \frac{1}{2}c_1\partial_{\beta}\Gamma_{\chi\delta\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi} - \frac{1}{2}c_1\partial_{\beta}\Gamma_{\chi\delta\alpha}\partial^{\delta}\Gamma^{\alpha\gamma} - \frac{1}{2}c_1\partial_{\beta}\Gamma_{\chi\delta\alpha}\partial^{\delta}\Gamma^{\alpha\gamma} - \frac{1}{2}c_1\partial_{\beta}\Gamma^{\alpha\gamma} - \frac{1}{2}c_1\partial_{\gamma}\Gamma^{\alpha\gamma} - \frac{1}{2}c_1\partial_{\gamma}\Gamma^{\alpha\gamma} - \frac{1}{2}c_1\partial_{\gamma}\Gamma^{\alpha\gamma} - \frac{1}{2}c_1\partial_{\gamma}\Gamma^{\alpha$
$\frac{3}{2}c_{1}\partial_{\beta}\partial_{\alpha}h_{\chi\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} - \frac{1}{2}c_{1}\partial_{\chi}\Gamma_{\alpha\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} - \frac{1}{2}c_{1}\partial_{\chi}\Gamma_{\beta\alpha\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} + c_{1}\partial_{\chi}\Gamma_{\beta\delta\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi} + \frac{3}{2}c_{1}\partial_{\chi}\partial_{\alpha}h_{\beta\delta}\partial^{\delta}\Gamma^{\alpha\beta\chi} - c_{1}\partial_{\delta}\Gamma_{\alpha\beta\chi}\partial^{\delta}\Gamma^{\alpha\beta\chi} - c_{1}\partial_{\delta}\Gamma_{\alpha\beta\chi}\partial^{\delta}\Gamma^{\alpha\gamma} - c_{1}\partial_{\delta}\Gamma_{\alpha\gamma}\partial^{\delta}\Gamma^{\alpha\gamma} - c_{1}\partial_{\delta}\Gamma_{\alpha\gamma}\partial^{\delta}\Gamma^{\alpha\gamma} - c_{1}\partial_{\delta}\Gamma^{\alpha\gamma} - c_{1}\partial_$
$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_{\beta \chi \alpha} \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_{\beta \chi \alpha} \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_{\beta \chi \alpha} \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_{\beta \chi \alpha} \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_{\beta \chi \alpha} \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_{\beta \chi \alpha} \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_{\beta \chi \alpha} \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_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} - \frac{1}{2} c_1 \partial_{\delta} \Gamma_{\alpha \lambda \gamma} \partial^{\delta} \Gamma^{\alpha \lambda \gamma} \partial^{\delta$
$\frac{1}{2}c_1\partial_{\delta}\Gamma_{\chi\beta\alpha}\partial^{\delta}\Gamma^{\alpha\beta\chi} + \frac{3}{2}c_1\partial_{\delta}\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_{\alpha}\Gamma^{\beta}\partial^{\delta}\Gamma^{\alpha\chi} - \frac{1}{2}c_1\partial_{\alpha}\Gamma^{\beta}\partial^{\delta}\Gamma^{\chi\alpha} - \frac{1}{2}c_1\partial_{\alpha}\Gamma^{\beta}\partial^{\delta}\Gamma^{\alpha} $
$\frac{11}{2}c_1\partial_{\beta}\Gamma_{\delta\alpha}{}^{\beta}\partial^{\delta}\Gamma^{\alpha\chi}{}_{\chi} - \frac{1}{2}c_1\partial^{\alpha}\Gamma_{\delta\alpha}{}^{\beta}\partial^{\delta}\Gamma_{\beta}{}^{\chi}{}_{\chi} + \frac{1}{2}c_1\partial_{\beta}\Gamma_{\delta\alpha}{}^{\beta}\partial^{\delta}\Gamma^{\chi\alpha}{}_{\chi} - \frac{3}{2}c_1\partial_{\alpha}\partial_{\alpha}h_{\alpha}\partial^{\delta}\partial^{\chi}h^{\alpha\beta} + \frac{3}{2}c_1\partial_{\alpha}\partial_{\alpha}h_{\alpha}\partial^{\delta}\partial^{\chi}h^{\alpha\beta} - \frac{3}{2}c_1\partial_{\alpha}\partial_{\alpha}h_{\alpha}\partial^{\delta}\partial^{\chi}h^{\alpha\beta}$
$\frac{\frac{3}{4}c_1\partial_{\beta}\partial_{\alpha}h_{\chi\delta}\partial^{\delta}\partial^{\chi}h^{\alpha\beta} + \frac{3}{2}c_1\partial_{\chi}\partial_{\beta}h_{\alpha\delta}\partial^{\delta}\partial^{\chi}h^{\alpha\beta} - \frac{3}{4}c_1\partial_{\delta}\partial_{\chi}h_{\alpha\beta}\partial^{\delta}\partial^{\chi}h^{\alpha\beta}}{\Delta ddod source term: } h^{\alpha\beta} \mathcal{T}_{\alpha\beta} \mathcal{T}_{\alpha\beta}$
Added source term: $h^{\alpha\beta} \mathcal{T}_{\alpha\beta} + \Gamma^{\alpha\beta\chi} \Delta_{\alpha\beta\chi}$





Quadratic pole

Pole residue:

Polarisations: 2

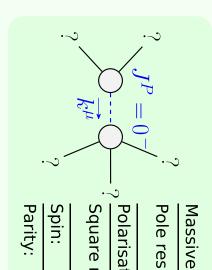
Unitarity conditions

(Unitarity is demonstrably impossible)

$\mathcal{T}_{1^{-}}^{\#1}\dagger^{lpha}$	$\Delta_{1^{-}}^{#6} +^{\alpha}$	$\Delta_{1}^{#5} + \alpha$	$\Delta_{1^{-}}^{\#4} + \alpha$	$\Delta_{1}^{#3} \uparrow^{\alpha}$	$\Delta_{1}^{#2} \uparrow^{\alpha}$	$\Delta_{1^{-}}^{\#1} +^{\alpha}$	$\Delta_{1}^{\#3}\dagger^{lphaeta}$	$\Delta_{1+}^{#2}\dagger^{lphaeta}$	$\Delta_{1+}^{#1} \dagger^{lphaeta}$	
0	0	0	0	0	0	0	0	$-\frac{2\sqrt{2}}{a_0}$	0	$\Delta_{1}^{\#1} \alpha \beta$
0	0	0	0	0	0	0	$\frac{40\sqrt{2}c_1k^2}{a_0^2 - 29a_0c_1k^2}$	$\frac{2(a_0^2 - 14 a_0 c_1 k^2 - 35 c_1^2 k^4)}{{a_0}^2 (a_0 - 29 c_1 k^2)}$	$-\frac{2\sqrt{2}}{a_0}$	$\Delta_{1+lphaeta}^{\#z}$
0	0	0	0	0	0	0	$\frac{4}{a_0-29c_1k^2}$	$\frac{40\sqrt{2}c_1k^2}{a_0^2-29a_0c_1k^2}$	0	$\Delta_{1}^{\#3} \alpha \beta$
0	0	0	0	0	$\frac{2\sqrt{2}}{a_0}$	0	0	0	0	$\Delta_{1^{-}\alpha}^{\#1}$
0	$50 \sqrt{\frac{2}{3}} c_1 k^2$ $a_0^2 - 33 a_0 c_1 k^2$	$\frac{10c_1 k^2 (-11a_0 + 118c_1 k^2)}{\sqrt{3} a_0^2 (a_0 - 33c_1 k^2)}$	$-\frac{5\sqrt{\frac{10}{3}}c_{1}k^{2}}{a_{0}^{2}-33a_{0}c_{1}k^{2}}$	$\frac{5\sqrt{\frac{2}{3}}c_1k^2(7a_0-236c_1k^2)}{a_0^2(a_0-33c_1k^2)}$	$\frac{2(a_0^2-30a_0c_1k^2+401c_1^2k^4)}{a_0^2(a_0-33c_1k^2)}$	$\frac{2\sqrt{2}}{a_0}$	0	0	0	$\Delta_{1-\alpha}^{\#2}$
0	$-\frac{a_0 - 28c_1 k^2}{6a_0^2 - 198a_0c_1 k^2}$	$-\frac{a_0^2 - 118 a_0 c_1 k^2 + 2560 c_1^2 k^4}{6 \sqrt{2} a_0^2 (a_0 - 33 c_1 k^2)}$	$\frac{\sqrt{5} (5a_0 - 164c_1 k^2)}{12a_0 (a_0 - 33c_1 k^2)}$	$\frac{-19a_0^2 + 472a_0c_1k^2 + 5120c_1^2k^4}{12a_0^2(a_0 - 33c_1k^2)}$	$\frac{5\sqrt{\frac{2}{3}}c_1k^2(7a_0-236c_1k^2)}{a_0^2(a_0-33c_1k^2)}$	0	0	0	0	$\Delta_{1-\alpha}^{\#3}$
0	$-\frac{\sqrt{5}}{6(a_0-33c_1k^2)}$	$-\frac{\sqrt{\frac{5}{2}} (a_0-82 c_1 k^2)}{6 a_0 (a_0-33 c_1 k^2)}$	$\frac{1}{12a_0-396c_1 k^2}$	$\frac{\sqrt{5} (5 a_0 - 164 c_1 k^2)}{12 a_0 (a_0 - 33 c_1 k^2)}$	$-\frac{5\sqrt{\frac{10}{3}}c_{1}k^{2}}{a_{0}^{2}-33a_{0}c_{1}k^{2}}$	0	0	0	0	$\Delta_{1^-}^{\#4}{}_{lpha}$
0	$\frac{7(a_0+2c_1 k^2)}{3\sqrt{2}a_0(a_0-33c_1 k^2)}$	$\frac{17a_0^2 - 236a_0c_1k^2 + 1280c_1^2k^4}{6a_0^2(a_0 - 33c_1k^2)}$	$-\frac{\sqrt{\frac{5}{2}} (a_0-82c_1 k^2)}{6a_0 (a_0-33c_1 k^2)}$	$-\frac{a_0^2 - 118 a_0 c_1 k^2 + 2560 c_1^2 k^4}{6 \sqrt{2} a_0^2 (a_0 - 33 c_1 k^2)}$	$\frac{10c_1k^2\left(-11a_0+118c_1k^2\right)}{\sqrt{3} a_0^2\left(a_0-33c_1k^2\right)}$	0	0	0	0	$\Delta_{1^-\alpha}^{\#^5}$
0	$\frac{5}{3(a_0-33c_1k^2)}$	$-\frac{7(a_0+2c_1 k^2)}{3\sqrt{2}a_0(a_0-33c_1 k^2)}$	$-\frac{\sqrt{5}}{6(a_0-33c_1k^2)}$	$\frac{a_0 - 28c_1 k^2}{6a_0^2 - 198a_0c_1 k^2}$	$50 \sqrt{\frac{2}{3}} c_1 k^2$ $a_0^2 - 33 a_0 c_1 k^2$	0	0	0	0	$\Delta_{1^{-}\alpha}^{\#_{6}}$
0	0	0	0	0	0	0	0	0	0	$\mathcal{T}_{1^-\alpha}^{\#1}$

										•		•
2						Γ ₀ -1	h ₀ ^{#2} +	$h_{0+}^{#1}$	Γ ₀ +4	Γ ₀ ^{#3} †	Γ ₀ ^{#2} †	Γ ₀ ^{#1} †
$2\sqrt{2}$	0	0	0	$\Delta_{1^-\alpha}^{\#2}$		0	0	$+ \frac{\frac{25 i c_1 k^3}{2 \sqrt{2}}}{\frac{2 \sqrt{2}}{\sqrt{2}}}$	$+ \frac{10c_1 k^2}{\sqrt{3}}$	$10\sqrt{\frac{2}{3}}c_1k^2$	0	$+\frac{1}{2}(-a_0+25c_1k^2)$
						0	0	0	$-\frac{a_0}{2\sqrt{2}}$	χ^2 $\frac{a_0}{2}$	0	$1 k^2$ 0
O	0	0	0	$\Delta_{1^-\alpha}^{#3}$		0	0	$\frac{10ic_1k^3}{\sqrt{3}}$	I	23c1 k ²	2 <u>a_0</u>	$10 \sqrt{\frac{2}{3}} c_1 k^2$
D	0	0	0	$\Delta_{1^- \alpha}^{\#4}$	Ē.	0	0	$-5i\sqrt{\frac{2}{3}}c_1k^3$	$\frac{1}{6} (3 a_0 + 23 c_1 k^2)$	$-\frac{3a_0+46c_1 k^2}{6 \sqrt{2}}$	$-\frac{a_0}{2\sqrt{2}}$	$-\frac{10c_1 k^2}{\sqrt{3}}$
O	0	0	0	$\Delta_{1^- lpha}^{\#_5}$	i.	0	0	$\frac{1}{4}k^2(a_0+25c_1k^2)$	5 i 1	$-\frac{10ic_1k^3}{\sqrt{3}}$	0	$\frac{25ic_1k^3}{2\sqrt{2}}$
						0	0	0	0	0	0	0
0	0	0	0	$\Delta_{1^-}^{\#_6} \alpha$	Š	$\frac{1}{2}\left(-a_0+c_1k^2\right)$	0	0	0	0	0	0
	0	0	0	\mathcal{T}_{1}^{\sharp}		Sour	· · · · · · · · · · · · · · · · · · ·	constra	ointe			
	<u> </u>			$\mathcal{T}_{1^{-}\alpha}^{#1}$		SO(3			JII1C3			#
						$\frac{\mathcal{T}_{0}^{\#2}}{}$		<i>"</i> 4	"2			1
									$3\Delta_{0}^{#2} ==$	0		1
						$\mathcal{T}_{1}^{\sharp 1}$				ντ <i>Ο</i>	#2 (X	3
						$\frac{2 \Delta_1^{\prime\prime}}{\text{Tota}}$		- Δ <u>#</u> -4α	+ 2 Δ ₁ [#]		Δ ₁ -3α =	= 0 3
						100	II #.					10
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$I^{P} = 3 - I$	•~)		;	k.t.	$J^{P} = 0$ k^{μ} L^{μ}							
-	n I ->	_	1.01		ა უ !	T -		T1.0	.? 	n! ~	17	- T
	Massive particle	Parity: (Spin:	Square mass: -	Polarisations:	Massive particle Pole residue:		Spin: 0	Square mass:	Pole residue: -	Massive particle	Parity:

·. ر	$\frac{1}{k^{\mu}}$		$/-c-dl$ \dot{i})		2	$\frac{1}{k^{\mu}}$		IP = 0-I
Spin:	Square mass:	Polarisations:	Pole residue:	Massive partion	Parity:	Spin:	Square mass:	Polarisations:	



 $\Gamma_{1}^{\#1}{}_{\alpha\beta}$

 $\Gamma_{1+}^{\#1} + \alpha \beta \left[\frac{1}{4} \left(-a_0 - 15 c_1 k^2 \right) \right] - \frac{a_0}{2 \sqrt{2}}$

 $-\frac{a_0}{2\sqrt{2}}$

 $5c_1k^2$

0

0

0

0

 $\Gamma_{1}^{\#2}_{lphaeta}$

0

0

0

0

0

0

0

0

 $(-a_0 + 25 c_1 k^2)$

 $\begin{array}{c|c}
\Gamma_{0+}^{\#3} \\
\hline
10 \sqrt{\frac{2}{3}} c_1 k^2 \\
\frac{a_0}{2} \\
\frac{23c_1 k^2}{3} \\
\frac{a_0+7}{3}
\end{array}$

 $h_{0+}^{#1}$ $-\frac{25ic_{1}k^{3}}{2\sqrt{2}}$ 0 $-\frac{10ic_{1}k^{3}}{\sqrt{3}}$

Γ₀-1

 $\Gamma_{1}^{\#3}{}_{\alpha\beta}$

 $5c_1k^2$

0

0

0

 $0 \quad \frac{1}{4} (a_0 - 29 c_1 k^2)$

 $\Gamma_{1}^{\#1}{}_{\alpha}$

0

0

 $\frac{a_0}{2\sqrt{2}}$

 $\frac{5}{2} \overline{\sqrt{3} c_1 k^2}$

 $-\frac{5}{2}\sqrt{\frac{5}{3}}c_1k^2$

 $5\sqrt{\frac{3}{2}}c_1k^2$

0

 $0 \left| \frac{1}{6} \right|$

0

 $\left| \frac{1}{4} \left(-a_0 - 3 c_1 k^2 \right) \right| \frac{a_0}{2 \sqrt{2}} \right|$

 $\Gamma_{1}^{#3}\alpha$

 $\frac{5}{2} \sqrt{3} c_1 k^2$

 $-\frac{a_0}{3}$

 $-\frac{a_0}{6\sqrt{2}}$

 $0 \quad \left| \frac{1}{6} \left(-a_0 + 20 \, c_1 \, k^2 \right) \right|$

 $\sqrt{5} (a_0 - 8c_1 k^2)$

 $\Gamma_{1}^{\#4}$ α

0

0

0

 $-\frac{5}{2} \sqrt{\frac{5}{3}} c_1 k^2$

0

 $\frac{1}{6} \sqrt{5} (a_0 - 8c_1 k^2)$

 $\frac{1}{3}(a_0 + 7c_1 k^2)$

 $-\frac{1}{6} \sqrt{\frac{5}{2}} (a_0 + 16 c_1 k^2)$

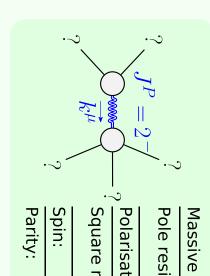
 $\Gamma_{1}^{\#5}$ α

0

0

0

 $5\sqrt{\frac{3}{2}}c_1k^2$



$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Massive Pole resi Polarisat Square r Spin:	Pole resi Polarisat Square n Spin: Parity:

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<i>P</i>	$\begin{pmatrix} P \\ - k \end{pmatrix}$
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	. ? ^	$\frac{k^{\mu}}{k^{\mu}}$	11	/-6 = dI i)
Parity:	Spin:	Square mass:	Polarisations:	Pole residue:	Massive particle
Odd	2	$\frac{a_0}{c_1} > 0$	5	$\frac{4}{c_1} > 0$	le

		The second		$/-c-dI \stackrel{\circ}{i}$)	
Parity:	Spin:	Square mas	, Polarisation	Pole residue	Massive pa	

9	$\mathcal{T}_{1}^{\#1\alpha} == 0$						
2	^{#6α} +	- Δ ₁ - +	-2 Δ ₁ ^{#5α}	+ Δ ₁ ^{#3α} =	= 0	3	
T	otal #:					8	
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P =		5	\frac{1}{2} \rightarrow \\ \frac{1}{2} \rightarrow \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	P			
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		$\overrightarrow{k^{\mu}}$		P 0-/	
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Massi	Spin: Parity	Squa	Polari	Pole i	

	. ? ^	$\frac{k^{\mu}}{k^{\mu}}$	7	$/-6 = dI$ \dot{i})
Parity:	Spin:	Square mass:	Polarisations:	Pole residue:	Massive particle
\cap	\sim	a D	(л	o_{-1}	עו

		•-	\circ			
Parity:	Spin:	Square mass:	Polarisations:	Pole residue:	Massive particle	
Ddd	3	$-\frac{a_0}{7c_1} > 0$	7	$\frac{2}{7c_1} > 0$	е	9

 $\frac{4907}{35\,937\,c_1} > 0$

Odd

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Pole residue:	Massive particle	Parity:	Spin:	Square mass:	₂ Polarisations:	Pole residue:
$\frac{2}{0} > 0$	е	Odd	2	$\frac{a_0}{5c_1} > 0$	5	$\frac{4}{5c_1} > 0$

)	.~)			·>	
Massive particle	Spin: Parity:	Square mass:	Polarisations:	Pole residue:	ividestive particle
e E	Odd	$\frac{c_1}{c_0} > 0$	Ъ	$-\frac{2}{c_1} > 0$	ā

12+1	$\frac{1}{\sqrt{3}}$
$h_{2}^{\#1} \dagger^{\alpha\beta}$	$\frac{11ic_1k}{4\sqrt{2}}$
$\Gamma_2^{\#1} \dagger^{\alpha\beta\chi}$	0
$\Gamma_2^{\#2} \dagger^{\alpha\beta\chi}$	0

0

0

0 2 0-c₁ k²

0

0

0

	$\Gamma^{\#1}_{2}{}^{+}_{lphaeta}$	$\Gamma_{2}^{\#2}_{\alpha\beta}$	$\Gamma_{2}^{\#3}_{\alpha\beta}$	$h_{2}^{\#1}_{+\alpha\beta}$	$\Gamma_2^{\#1}_{\alpha\beta\chi}$	Γ ₂ - _{αβχ}
¹ † ^{αβ}	$\frac{1}{4} (a_0 + 11 c_1 k^2)$	$-5\sqrt{\frac{2}{3}}c_1k^2$	$\frac{5c_1k^2}{\sqrt{3}}$	$-\frac{11ic_1k^3}{4\sqrt{2}}$	0	0
² † ^{αβ}	$-5\sqrt{\frac{2}{3}}c_1k^2$	$\frac{1}{6} \left(-3 a_0 + c_1 k^2 \right)$	$-\frac{c_1 k^2}{6 \sqrt{2}}$	$\frac{5 i c_1 k^3}{\sqrt{3}}$	0	0
$^3_+$ † $^{\alpha\beta}$	$\frac{5c_1k^2}{\sqrt{3}}$	$-\frac{c_1 k^2}{6 \sqrt{2}}$	$\frac{1}{12} \left(3 a_0 + c_1 k^2 \right)$	$-\frac{5ic_1k^3}{\sqrt{6}}$	0	0
$^1_+$ † $^{\alpha\beta}$	$\frac{11ic_1k^3}{4\sqrt{2}}$	$-\frac{5ic_1k^3}{\sqrt{3}}$	$\frac{5 i c_1 k^3}{\sqrt{6}}$	$-\frac{1}{8} k^2 (a_0 - 11 c_1 k^2)$	0	0
$+^{\alpha\beta\chi}$	0	0	0	0	$\frac{1}{2}(a_0-c_1k^2)$	0

$\Delta_{0^{-}}^{\#1}\dagger$	T ₀ ^{#2} †	${\cal T}_{0^+}^{\#1}$ 1	$\Delta_0^{\#_2}$	$\Delta_{0}^{#3}$	$\Delta_0^{\#2}$	$\Delta_0^{#1}$			
+	+		-	+	_+	+ - 2 (c		$\Delta_{2}^{\#1}\dagger^{lphaeta}$	4(
0	0	$\frac{50i\sqrt{2}c_1k}{a_0^2}$	$\frac{20c_1 k^2}{\sqrt{3} a_0^2}$	$\frac{10\sqrt{\frac{2}{3}}c_1k^2}{a_0^2}$	$\frac{10\sqrt{6}c_1k^2}{a_0^2}$	$\frac{2(a_0+25c_1 k^2)}{a_0^2}$	$\Delta_0^{\#1}$	$\Delta_{2}^{\#2} \dagger^{\alpha\beta}$	4
		- 20 i	- ^{a0-2}	5 <i>a</i> ₀ +	$-\frac{3(a_0+}{4}$	$\frac{10 }{a}$	Δ	$\Delta_{2}^{#3} \dagger^{\alpha\beta}$	
0	0	$\frac{20i\sqrt{3}c_1k}{a_0^2}$	$-\frac{a_0-23c_1k^2}{2\sqrt{2}a_0^2}$	$\frac{5a_0+23c_1k^2}{4a_0^2}$	$\frac{3(a_0+23c_1 k^2)}{4a_0^2}$	$\frac{10\sqrt{6}c_1k^2}{a_0^2}$	$\Delta_0^{\#2}$	${\mathcal T}_{\mathtt{2}^{+}}^{\mathtt{#1}}\dagger^{lphaeta}$	4
	0	$\frac{20 i c_1 k}{\sqrt{3} a_0^2}$	$-\frac{3a_0+3}{6\sqrt{3}}$	- 9 <i>a</i> 0+;	$\frac{5a_0 + 23c_1 k^2}{4a_0^2}$	$-\frac{10\sqrt{3}}{a}$	$\Delta_{0}^{#3}$	$\Delta_2^{#1} \dagger^{\alpha\beta\chi}$	
)	$\frac{c_1 k}{a_0^2}$	$\frac{3a_0 + 23c_1 k^2}{6\sqrt{2}a_0^2}$	$\frac{9a_0 + 23c_1 k^2}{12a_0^2}$	3 <i>c</i> 1 <i>k</i> ² 0 ²	$\frac{10\sqrt{\frac{2}{3}}c_1k^2}{a_0^2}$	#3)+	$\Delta_2^{\#2} \dagger^{\alpha\beta\chi}$	
0	0	$\frac{20i\sqrt{\frac{2}{3}}c_1k}{a_0^2}$	$\frac{3a_0-23c_1k^2}{6a_0^2}$	$-\frac{3a_0+23c_1k^2}{6\sqrt{2}a_0^2}$	$-\frac{a_0-23c_1 k^2}{2 \sqrt{2} a_0^2}$	$-\frac{20c_1 k^2}{\sqrt{3} a_0^2}$	$\Delta_{0}^{\#4}$		
0	0	$\frac{4(a_0-25c_1k^2)}{a_0^2k^2}$	$-\frac{20i\sqrt{\frac{2}{3}}c_{1}k}{a_{0}^{2}}$	$-\frac{20ic_1k}{\sqrt{3}a_0^2}$	$\frac{20i\sqrt{3}c_1k}{a_0^2}$	$-\frac{50i\sqrt{2}c_1k}{a_0^2}$	${\mathcal T}_{0^+}^{\#1}$		

0

0

0

0

0

$-\frac{1}{6} $	$\frac{1}{6} \sqrt{5} (a_0 - 5 c_1 k^2)$			$\frac{a_0 + 40 c_1 k^2}{6 \sqrt{2}} \qquad \frac{5}{12} (a_0 - 17 c_1 k^2)$				$c_0 - 17 c_1 k^2)$	0			
	0				0 0			0				
$\Delta_{0}^{\#}$					$\Delta^{\#1}_{2^+lphaeta}$	$\Delta_2^{\#}$	2 ⁺ αβ	$\Delta_{2}^{\#3}{}_{lphaeta}$	${\mathcal T}_2^{\#_2^2}$	-	$\Delta_{2}^{\#1}{}_{\alpha\beta\chi}$	$\Delta_{2}^{#2}\alpha_{1}$
$\Delta_{0}^{#1} + \left -\frac{2(a_{1})}{a_{1}} \right $			$\Delta_2^{\#1}$	$\dagger^{lphaeta}$	$\frac{4(a_0-11c_1k^2)}{{a_0}^2}$	$-\frac{40}{a}$	$\frac{\frac{2}{3}}{0^2}c_1k^2$	$-\frac{80c_1k^2}{\sqrt{3}a_0^2}$	- 44 i √ a($\frac{2}{2} \frac{c_1 k}{c_1}$	0	0
$-\frac{2(a_0+25c_1 k^2)}{a_0^2}$	$\Delta_{0}^{\#1}$		$\Delta_{2}^{\#2}$	$\dagger^{\alpha\beta}$	$-\frac{40\sqrt{\frac{2}{3}}c_1k^2}{a_0^2}$	- 2 (3 a ₀	$\frac{1+c_1 k^2}{a_0^2}$	$-\frac{2\sqrt{2}c_1k^2}{3a_0^2}$	- 80 i	c _{1 k} a ₀ ²	0	0
	D		$\Delta_2^{#3}$	† ^{αβ}	$-\frac{80c_1k^2}{\sqrt{3}a_0^2}$	$-\frac{2\sqrt{2}}{3u}$	$\frac{\sqrt{c_1} k^2}{a_0^2}$	$\frac{4(3a_0-c_1k^2)}{3a_0^2}$	$-\frac{80 i \sqrt{a_0}}{a_0}$		0	0
$\frac{10\sqrt{6}c_1k^2}{a_0^2}$	Δ ₀ ^{#2}		${\mathcal T}_2^{\sharp 1}$	$\dagger^{\alpha\beta}$	$\frac{44i\sqrt{2}c_1k}{a_0^2}$	80 i √3	$\frac{c_1 k}{a_0^2}$	$\frac{80 i \sqrt{\frac{2}{3}} c_1 k}{a_0^2}$	$-\frac{8(a_0+1)}{a_0^2}$	$\frac{1c_1k^2}{2k^2}$	0	0

0

0

 $\frac{1}{4} (a_0 - 5 c_1 k^2)$

0

0

 $\Gamma_{1}^{\#6}$ α

0

0

0

 $-\frac{5c_1k^2}{\sqrt{3}}$

0

 $\frac{a_0 + 40 c_1 k^2}{6 \sqrt{2}}$

 $\left| -\frac{1}{6} \sqrt{\frac{5}{2}} \left(a_0 + 16 c_1 k^2 \right) \right| - \frac{1}{6} \sqrt{5} \left(a_0 - 5 c_1 k^2 \right) \right| \quad 0$

 $\frac{1}{6}\left(-a_0+20\,c_1\,k^2\right)$ 0

0

 $\frac{4}{a_0 - c_1 k^2}$

0

 $\frac{4}{a_0-5c_1k^2}$