```
C_{\mathsf{uG}}^{\mathsf{i1}_{-}\mathsf{i2}_{-}} 	o
        \hbar \left( \frac{1}{12} g_3 s_{\gamma} \frac{1}{m_{c}^2} y_u^{\text{pi2}} \left( \overline{y_d}^{\text{pr}} y_d^{\text{ilr}} \left( -3 c_{\gamma}^2 + s_{\gamma}^2 \right) + 3 c_{\gamma}^2 \overline{y_u}^{\text{pr}} y_u^{\text{ilr}} \right) - \frac{1}{2} g_3 s_{\gamma} c_{\gamma}^2 \overline{y_d}^{\text{pr}} y_d^{\text{ilr}} y_u^{\text{pi2}} \right)
                                                                                                                                                                                                 \mathsf{LF}_{1,2} \left[ \, \mathsf{m}_{_{\bar{0}}} \, \right] \, + \, \frac{1}{72} \, \mathsf{g}_{3} \, \mathsf{s}_{_{Y}} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{y}_{u}^{\, \, i \, 1i \, 2} \, \mathsf{LF}_{2,1,0} \left[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{_{\bar{q}}}^{\, \, i \, 1} \, \right] \, - \, \frac{1}{36} \, \mathsf{g}_{3} \, \mathsf{s}_{_{Y}} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{y}_{u}^{\, \, i \, 1i \, 2} \, \mathsf{LF}_{3,1,-1} \left[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{_{\bar{q}}}^{\, \, i \, 1} \, \right] \, + \, \frac{1}{36} \, \mathsf{g}_{3} \, \mathsf{s}_{_{Y}} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{y}_{u}^{\, \, i \, 1i \, 2} \, \mathsf{LF}_{3,1,-1} \left[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{_{\bar{q}}}^{\, \, i \, 1} \, \right] \, + \, \frac{1}{36} \, \mathsf{g}_{3} \, \mathsf{s}_{_{Y}} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{g}_{2}^{\, 2} \, \mathsf{g}_{3}^{\, 2} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{g}_{2}^{\, 2} \, \mathsf{g}_{3}^{\, 2} \, \mathsf{g}_{1}^{\, 2} \, \mathsf{g}_{2}^{\, 2} \, \mathsf{g}_{3}^{\, 2} \, \mathsf{g}_{2}^{\, 2} \, \mathsf{g}_{3}^{\, 2} \, \mathsf{
                                                                                                                                                                  \frac{1}{72} g_3 s_{\gamma} g_{1}^{2} y_{u}^{i1i2} LF_{4,1,-2}[m_{1}, m_{\tilde{q}}^{i1}] + \frac{2}{9} g_3 s_{\gamma} g_{1}^{2} y_{u}^{i1i2} LF_{2,1,0}[m_{1}, m_{\tilde{u}}^{i2}] -
                                                                                                                                                                                                           g_{3}\;s_{\gamma}\;g_{1}^{\;2}\;y_{u}^{\;i\,1\,i\,2}\;LF_{3\,,\,1\,,\,^{-}1}\!\left[m_{1}\,,\;m_{\bar{u}}^{\;i\,2}\right]\,+\,\frac{2}{9}\;g_{3}\;s_{\gamma}\;g_{1}^{\;2}\;y_{u}^{\;i\,1\,i\,2}\;LF_{4\,,\,1\,,\,^{-}2}\!\left[m_{1}\,,\;m_{\bar{u}}^{\;i\,2}\right]\,+\,\frac{2}{9}\left[m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m_{1}^{\;2}\,m
                                                                                                                                                                                                      g_3 \; s_{\gamma} \; g_2{}^2 \; y_u{}^{\text{ili2}} \; \mathsf{LF}_{2,1,0} \left[ \, \mathsf{m}_2 \,, \; \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, \right] \; - \; \tfrac{3}{4} \; g_3 \; s_{\gamma} \; g_2{}^2 \; y_u{}^{\text{ili2}} \; \mathsf{LF}_{3,1,-1} \left[ \, \mathsf{m}_2 \,, \; \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, \right] \; + \; \mathsf{m}_{\tilde{q}}{}^{\text{il}} \; + \; \mathsf
                                                                                                                                                                                                      g_3 \, s_{\gamma} \, g_2{}^2 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{4,1,-2}} \big[ \mathsf{m_2} \, , \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, g_3{}^3 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, g_3{}^3 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, g_3{}^3 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, g_3{}^3 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, g_3{}^3 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, g_3{}^3 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, g_3{}^3 \, y_u{}^{\text{ili2}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, \mathsf{m_{\tilde{q}}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \mathsf{m_{\tilde{q}}}{}^{\text{il}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, \mathsf{m_{\tilde{q}}} \, \mathsf{LF_{2,1,0}} \big[ \, \mathsf{m_3} \, , \, \, \, \mathsf{m_{\tilde{q}}} \, \mathsf{m_{\tilde{q}}} \big] \, - \, \tfrac{1}{12} \, s_{\gamma} \, \mathsf{m_{\tilde{q}}} \, \mathsf{m_{\tilde{q}}}
                                                                                                                                                                                                                                s_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \big[ \, m_{3} \, , \; m_{\tilde{q}}{}^{\text{il}} \big] \; + \; \frac{2}{3} \; s_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{4,1,-2} \big[ \, m_{3} \, , \; m_{\tilde{q}}{}^{\text{il}} \big] \; - \; \frac{1}{3} \; m_{\tilde{q}}{}^{\text{il}} \, g_{3}{}^{\text{il}} \, g_{3}
                                                                                                                                                                                                                                s_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{2,1,0} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{i2}} \, \right] \; - \; \frac{7}{12} \; s_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{i2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{i2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{i2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{i2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{ili2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{ili2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; LF_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{ili2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; F_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{ili2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; F_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{ili2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{3}{}^{3} \; y_{u}{}^{\text{ili2}} \; F_{3,1,-1} \left[ \, m_{3} \, , \; m_{\bar{u}}{}^{\text{ili2}} \, \right] \; + \; \frac{1}{12} \; g_{\gamma} \; g_{\gamma
                                                                                                                                                                                                                g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{3,1,-1} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\text{pr}} \; y_{d}^{\; \text{iir}} \; y_{u}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; y_{d}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{r}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; y_{d}^{\; \text{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{pr}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; y_{d}^{\; \text{pr}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{pr}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; y_{d}^{\; \text{pr}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{\bar{d}}^{\; \text{pr}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; \mathsf{M}_{2} \big[ \mathsf{m}_{2} \; , \; \mathsf{m}_{2}^{\; \text{pr}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; \mathsf{M}_{2} \big[ \mathsf{m}_{2} \; , \; \mathsf{m}_{2}^{\; \text{pr}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; \mathsf{M}_{2} \big[ \mathsf{m}_{2} \; , \; \mathsf{m}_{2}^{\; \text{pr}} \big] \; + \; \frac{1}{4} \; g_{3} \; s_{\gamma} \; \overline{y_{d}}^{\; \text{pr}} \; \mathsf{M}_{2} \big[ \mathsf{m}_{2} \; , \; \mathsf{m}_{2}^{\; \text{pr}} \big] \; + \; \frac{1}{4} \;
                                                                                                                                                                                                           g_3 \; s_\gamma \; \overline{y_u}^{\text{pr}} \; y_u^{\text{pi2}} \; y_u^{\text{ilr}} \; \mathsf{LF}_{2,1,0} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; - \; g_3 \; s_\gamma \; \overline{y_u}^{\text{pr}} \; y_u^{\text{pi2}} \; y_u^{\text{ilr}} \; \mathsf{LF}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ \widetilde{\mu} \text{, } m_{\tilde{q}}^{\text{p}} \big] \; + \; \mathsf{I}_{3,1,-1} \big[ 
                                                                                                                                                                                                           g_3 \; s_\gamma \; \overline{y_u}^{\text{pr}} \; y_u^{\text{pi2}} \; y_u^{\text{ilr}} \; \mathsf{LF_{4,1,-2}} \big[ \widetilde{\mu} \,, \; m_{\tilde{q}}^{\text{\,p}} \big] \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{pr}} \; y_u^{\text{\,pi2}} \; y_u^{\text{\,ilr}} \; \mathsf{LF_{2,1,0}} \big[ \widetilde{\mu} \,, \; m_{\tilde{u}}^{\text{\,r}} \big] \; - \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; y_u^{\text{\,pi3}} \; y_u^{\text{\,pi4}} \; y_u^{\text{\,pi7}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; y_u^{\text{\,pi4}} \; y_u^{\text{\,pi4}} \; y_u^{\text{\,pi4}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; y_u^{\text{\,pi4}} \; y_u^{\text{\,pi4}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; y_u^{\text{\,pi4}} \; y_u^{\text{\,pi4}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; y_u^{\text{\,pi4}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; y_u^{\text{\,pi4}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; s_\gamma \; \overline{y_u}^{\text{\,pr}} \; + \; \frac{1}{4} \; g_3 \; \overline{y_u
                                                                                                                                                                                                           g_3 \, s_\gamma \, \overline{y_u}^{\text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{ilr}} \, LF_{3,1,-1} \big[ \widetilde{\mu} \, , \, m_{\tilde{u}}^{\, \text{r}} \big] \, + \, \frac{1}{4} \, g_3 \, s_\gamma \, \overline{y_u}^{\text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{ilr}} \, LF_{4,1,-2} \big[ \widetilde{\mu} \, , \, m_{\tilde{u}}^{\, \text{r}} \big] \, + \, \frac{1}{4} \, g_3 \, s_\gamma \, \overline{y_u}^{\, \text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{ilr}} \, LF_{4,1,-2} \big[ \widetilde{\mu} \, , \, m_{\tilde{u}}^{\, \text{r}} \big] \, + \, \frac{1}{4} \, g_3 \, s_\gamma \, \overline{y_u}^{\, \text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{ilr}} \, LF_{4,1,-2} \big[ \widetilde{\mu} \, , \, m_{\tilde{u}}^{\, \text{r}} \big] \, + \, \frac{1}{4} \, g_3 \, s_\gamma \, \overline{y_u}^{\, \text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{pi3}} \, y_u^{\, \text{pi3}} \, + \, \frac{1}{4} \, g_3 \, s_\gamma \, \overline{y_u}^{\, \text{pr}} \, y_u^{\, \text{pi3}} \, y_u^{\, \text{pi3}} \, y_u^{\, \text{pi3}} \, + \, \frac{1}{4} \, g_3 \, s_\gamma \, \overline{y_u}^{\, \text{pr}} \, y_u^{\, \text{pi3}} \, y_u^
                                                                                                                                                                                                           \mathbf{g_3} \hspace{0.1cm} \mathbf{m_1} \hspace{0.1cm} \mathbf{g_1}^{2} \hspace{0.1cm} \left( -\hspace{0.1cm} \mathbf{s_{\scriptscriptstyle Y}} \hspace{0.1cm} \mathbf{a_u}^{\hspace{0.1cm} \texttt{ili2}} + \widetilde{\mu} \hspace{0.1cm} \mathbf{c_{\scriptscriptstyle Y}} \hspace{0.1cm} \mathbf{y_u}^{\hspace{0.1cm} \texttt{ili2}} \right) \hspace{0.1cm} \mathsf{LF_{2,1,1,0}} \big[ \hspace{0.1cm} \mathbf{m_1} \hspace{0.1cm} , \hspace{0.1cm} \mathbf{m_{\tilde{q}}}^{\hspace{0.1cm} \texttt{il}} \hspace{0.1cm} , \hspace{0.1cm} \mathbf{m_{\tilde{u}}}^{\hspace{0.1cm} \texttt{i2}} \big] \hspace{0.1cm} + \hspace{0.1cm} \mathbf{m_{\tilde{q}}}^{\hspace{0.1cm} \texttt{il}} \hspace{0.1cm} , \hspace{0.1cm} \mathbf{m_{\tilde{q}}}^{\hspace{0.1cm} \texttt{il}} \hspace{0.1cm}
                                                                                                                                                             \frac{1}{9} \; g_3 \; m_1 \; g_1^{\; 2} \; \left( \, s_{_{Y}} \; a_u^{\; \text{ili2}} \, - \, \widetilde{\mu} \; c_{_{Y}} \; y_u^{\; \text{ili2}} \right) \; \mathsf{LF}_{3,1,1,-1} \big[ \, m_1 \, , \; m_{_{\tilde{\mathbf{q}}}}^{\; \, \text{il}} \, , \; m_{_{\tilde{\mathbf{u}}}}^{\; \, \, \text{il}} \, \big] \; - \; \widetilde{\mu} \; c_{_{Y}} \; y_u^{\; \, \, \, \, \text{ili2}} \, \right] \; .
                                                                                                                                                                                                                                     g_3 \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{1,1,1,0} \big[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, , \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_3 \, \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{2,1,1,-1} \big[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, , \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_{3} \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{2,1,1,-1} \big[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, , \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_{3} \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{2,1,1,-1} \big[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, , \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_{3} \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{2,1,1,-1} \big[ \, \mathsf{m}_{1} \, , \, \, \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, , \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_{3} \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{2,1,1,-1} \big[ \, \mathsf{m}_{1} \, , \, \, \, \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, , \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_{3} \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{2,1,1,-1} \big[ \, \mathsf{m}_{1} \, , \, \, \, \mathsf{m}_{\tilde{q}}{}^{\text{il}} \, , \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_{3} \, s_{\gamma} \, g_{1}{}^2 \, y_{u}{}^{\text{ili2}} \, \mathsf{LF}_{2,1,1,-1} \big[ \, \mathsf{m}_{1} \, , \, \, \, \mathsf{m}_{\tilde{q}}{}^{\text{ili2}} \, , \, \, \, \tilde{\mu} \, \big] \, + \, \frac{1}{6} \, g_{3} \, s_{\gamma} \, g_{1}{}^2 \, g_{1}{}^2 \, g_{1}{}^2 \, g_{2}{}^2 \, g_{1}{}^2 \, g_{2}{}^2 \, g_{1}{}^2 \, g_{2}{}^2 \, g
                                                                                                                                                                                                                                \mathsf{g_3} \; \mathsf{m_1} \; \widetilde{\boldsymbol{\mu}} \; \mathsf{c_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{2,1,1,0}} \big[ \mathsf{m_1}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}}, \; \widetilde{\boldsymbol{\mu}} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{s_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \mathsf{m_1}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{s_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \mathsf{m_1}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{s_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \mathsf{m_1}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{s_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \mathsf{m_1}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{s_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \mathsf{m_1}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{s_{Y}} \; \mathsf{g_1}^2 \; \mathsf{g_1}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_2}^2 \; \mathsf{g_2}^2 \; \mathsf{g_3}^2 \;
                                                                                                                                                             \frac{1}{12} \; g_3 \; m_1 \; \widetilde{\mu} \; c_{\gamma} \; g_1^2 \; y_u^{\text{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ m_1, \; m_{\tilde{q}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \frac{1}{3} \; g_3 \; s_{\gamma} \; g_1^2 \; y_u^{\text{ili2}} \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{i2}}, \; \widetilde{\mu} \big] \; - \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0}} \big[ m_1, \; m_{\tilde{u}}^{\text{il}}, \; \widetilde{\mu} \big] \; + \; \mathsf{LF_{1,1,1,0
                                                                                                                                                                                                 \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{i1i2}} \; \mathsf{LF_{2,1,1,-1}} \big[ \, \mathsf{m_1} \,, \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \,, \; \tilde{\mu} \, \big] \; - \; \frac{1}{3} \; \mathsf{g_3} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{i1i2}} \; \mathsf{LF_{2,1,1,0}} \big[ \, \mathsf{m_1} \,, \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \,, \; \tilde{\mu} \, \big] \; + \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \,, \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \,,
                                                                                                                                                                                                      \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\texttt{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \mathsf{m_1} \text{, } \mathsf{m_{\bar{u}}}^{\texttt{i2}} \text{, } \widetilde{\mu} \big] \; + \; \frac{1}{3} \; \mathsf{g_3} \; \mathsf{m_1} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\texttt{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \mathsf{m_1} \text{, } \mathsf{m_{\bar{u}}}^{\texttt{i2}} \text{, } \widetilde{\mu} \big] \; - \; \mathsf{m_{\bar{u}}}^{\texttt{i2}} \; \mathsf{m_{\bar{u}}}^
                                                                                                                                                                                                                                \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{2,2,1,-2}} \big[ \mathsf{m_1}, \; \widetilde{\mu}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{2,2,1,-1}} \big[ \mathsf{m_1}, \; \widetilde{\mu}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; + \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{2,2,1,-1}} \big[ \mathsf{m_1}, \; \widetilde{\mu}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; + \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{g_1}^2 \; \mathsf{g_1}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_2}^2
                                                                                                                                                                                                      g_3 \; s_{\gamma} \; g_{1}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{2,2,1,-2} \big[ \, \mathsf{m}_{1} \, , \; \tilde{\mu} \, , \; \mathsf{m}_{\tilde{u}}^{\; \text{i} \, 2} \, \big] \; + \; \frac{1}{3} \; g_3 \; \mathsf{m}_{1} \; \tilde{\mu} \; \mathsf{c}_{\gamma} \; g_{1}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{2,2,1,-1} \big[ \, \mathsf{m}_{1} \, , \; \tilde{\mu} \, , \; \mathsf{m}_{\tilde{u}}^{\; \text{i} \, 2} \, \big] \; + \; \frac{1}{3} \; g_{1} \; \mathsf{m}_{1} \; \tilde{\mu} \; \mathsf{c}_{\gamma} \; g_{1}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{2,2,1,-1} \big[ \, \mathsf{m}_{1} \, , \; \tilde{\mu} \, , \; \mathsf{m}_{\tilde{u}}^{\; \text{il} \, 2} \, \big] \; + \; \frac{1}{3} \; g_{1} \; \mathsf{m}_{1} \; \tilde{\mu} \; \mathsf{c}_{\gamma} \; g_{1}^{\; 2} \; \mathsf{c}_{\gamma} \; \mathsf{c}
                                                                                                                                                                                                           g_{3} \; m_{2} \; \widetilde{\mu} \; c_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{2,1,1,0} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{il}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{il}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{il}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{il}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{il}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{il}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{il}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{ili2}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{ili2}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{ili2}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{ili2}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{3,1,1,1,-2} \left[ \; m_{2} \; , \; m_{\tilde{q}}^{\; \text{ili2}} \; , \; \widetilde{\mu} \; \right] \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{2}^{\; 2} \; y_{u}^{\; \text{ili2}} \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{\gamma} \; + \; \frac{3}{4} \; g_{3} \; s_{\gamma} \; g_{\gamma} \; + \; \frac{3}{4} \; g_{\gamma} \; s_{\gamma} \; + \; \frac{3}{4} \; g_{\gamma} \; s_{\gamma} \; + \; \frac{3}{4} \; g_{\gamma} \; + \; \frac{3}{4} \; g_{\gamma} \; s_{\gamma} \; + \; \frac{3}{4} \; g_{\gamma} \; + 
                                                                                                                                                                                                           \mathsf{g_3} \; \mathsf{m_2} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_2}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \mathsf{m_2} \, , \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \, , \; \widetilde{\mu} \big] \; + \; \frac{3}{4} \; \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_2}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{2,2,1,-2}} \big[ \mathsf{m_2} \, , \; \widetilde{\mu} \, , \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; + \; \frac{3}{4} \; \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_2}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{2,2,1,-2}} \big[ \mathsf{m_2} \, , \; \widetilde{\mu} \, , \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; + \; \frac{3}{4} \; \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_2}^2 \; \mathsf{g_3}^2 \; \mathsf{g
                                                                                                                                                                  \frac{3}{4} \; g_3 \; m_2 \; \widetilde{\mu} \; c_{\gamma} \; g_2^2 \; y_u^{\; \text{ili2}} \; \mathsf{LF}_{2,2,1,-1} \big[ \; m_2 \, , \; \widetilde{\mu} \, , \; m_{\tilde{q}}^{\; \text{il}} \big] \; + \; \frac{1}{6} \; m_3 \; g_3^{\; 3} \; \left( s_{\gamma} \; a_u^{\; \text{ili2}} - \widetilde{\mu} \; c_{\gamma} \; y_u^{\; \text{ili2}} \right)
                                                                                                                                                                                                 \mathsf{LF_{2,1,1,0}}\big[\,\mathsf{m_{3}}\,,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{4}{3}\,\,\mathsf{m_{3}}\,\,\mathsf{g_{3}}^{\,\,3}\,\,\big(\,\mathsf{s_{\gamma}}\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,-\,\widetilde{\mu}\,\,\mathsf{c_{\gamma}}\,\mathsf{y_{u}}^{\,\,\text{i1i2}}\big)\,\,\mathsf{LF_{3,1,1,-1}}\big[\,\mathsf{m_{3}}\,,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{4}{3}\,\,\mathsf{m_{3}}\,\,\mathsf{g_{3}}^{\,\,\text{i3}}\,\,\big(\,\mathsf{s_{\gamma}}\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,-\,\widetilde{\mu}\,\,\mathsf{c_{\gamma}}\,\mathsf{y_{u}}^{\,\,\text{i1i2}}\big)\,\,\mathsf{LF_{3,1,1,-1}}\big[\,\mathsf{m_{3}}\,,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{4}{3}\,\,\mathsf{m_{3}}\,\,\mathsf{g_{3}}^{\,\,\text{i3}}\,\,\big(\,\mathsf{s_{\gamma}}\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,-\,\widetilde{\mu}\,\,\mathsf{c_{\gamma}}\,\mathsf{y_{u}}^{\,\,\text{i1i2}}\big)\,\,\mathsf{LF_{3,1,1,-1}}\big[\,\mathsf{m_{3}}\,,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{4}{3}\,\,\mathsf{m_{3}}\,\,\mathsf{g_{3}}^{\,\,\text{i3}}\,\,\big(\,\mathsf{s_{\gamma}}\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,-\,\widetilde{\mu}\,\,\mathsf{c_{\gamma}}\,\mathsf{y_{u}}^{\,\,\text{i1i2}}\,\big)\,\,\mathsf{LF_{3,1,1,-1}}\big[\,\mathsf{m_{3}}\,,\,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{4}{3}\,\,\mathsf{m_{3}}\,\,\mathsf{g_{3}}^{\,\,\text{i3}}\,\,\big(\,\mathsf{s_{\gamma}}\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,,\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,\big)\,\,\mathsf{LF_{3,1,1,-1}}\big[\,\mathsf{m_{3}}\,,\,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i1}}\,\big]\,+\,\frac{4}{3}\,\,\mathsf{m_{3}}\,\,\mathsf{g_{3}}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-1,-1}^{\,\,\text{i1i2}}\,\,\mathcal{S}_{1,1,-
                                                                                                                                                                                                                \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_{1}}^2 \; \mathsf{y_u}^{\text{ili2}} \; \mathsf{LF_{2,1,1,-1}} \big[ \widetilde{\mu} \text{, } \mathsf{m_1} \text{, } \mathsf{m_{\tilde{q}}}^{\text{il}} \big] \; + \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_{1}}^2 \; \mathsf{y_u}^{\text{ili2}} \; \mathsf{LF_{2,1,1,0}} \big[ \widetilde{\mu} \text{, } \mathsf{m_1} \text{, } \mathsf{m_{\tilde{q}}}^{\text{il}} \big] \; - \; \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \big[ \mathsf{m_{\tilde{q}}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \big] \; + \; \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q}}}^{\text{il}} \, \mathsf{m_{\tilde{q}}}^{\text{il}} \; \mathsf{m_{\tilde{q
                                                                                                                                                                                                                                     \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \tilde{\mu} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\bar{q}}}^{\mathsf{il}1} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\bar{q}}}^{\mathsf{il}1} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\bar{q}}}^{\mathsf{il}1} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\bar{q}}}^{\mathsf{il}1} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\bar{q}}}^{\mathsf{il}1} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\bar{q}}}^{\mathsf{il}1} \big] \; - \; \frac{1}{12} \; \mathsf{g_3} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{g_2}^2 \; \mathsf{g_2}^2 \; \mathsf{g_3}^2 \; \mathsf{g_3}^
                                                                                                                                                                                                           g_3 \; s_{\gamma} \; g_{1}^{2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{2,1,1,-1} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{1} \; , \; \mathsf{m}_{\tilde{u}}^{\; \text{il}2} \big] \; - \; \frac{1}{3} \; g_3 \; \mathsf{m}_{1} \; \widetilde{\mu} \; c_{\gamma} \; g_{1}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{2,1,1,0} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{1} \; , \; \mathsf{m}_{\tilde{u}}^{\; \text{il}2} \big] \; + \; \frac{1}{3} \; g_{1}^{\; 2} \; g_{1}^{\; 2} \; y_{u}^{\; \text{ili2}} \; \mathsf{LF}_{2,1,1,0} \big[ \widetilde{\mu} \; , \; \mathsf{m}_{1} \; , \; \mathsf{m}_{\tilde{u}}^{\; \text{il}2} \big] \; + \; \frac{1}{3} \; g_{1}^{\; 2} 
                                                                                                                                                                                                           \mathsf{g_3} \; \mathsf{s_{\gamma}} \; \mathsf{g_{1}}^2 \; \mathsf{y_u}^{\text{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \widetilde{\mu} \text{, } \mathsf{m_1} \text{, } \mathsf{m_{\tilde{u}}}^{\text{i2}} \big] \; + \; \frac{1}{3} \; \mathsf{g_3} \; \mathsf{m_1} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_{1}}^2 \; \mathsf{y_u}^{\text{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \widetilde{\mu} \text{, } \mathsf{m_1} \text{, } \mathsf{m_{\tilde{u}}}^{\text{i2}} \big] \; - \; \frac{1}{3} \; \mathsf{g_{1}} \; \mathsf{m_{1}} \; \mathsf{m_{1}} \; \mathsf{m_{1}}^{\text{in}} \; \mathsf{m_{1}}^{\text{in}
                                                                                                                                                                                                           \mathsf{g_3} \, \mathsf{s_{Y}} \, \mathsf{g_2}^2 \, \mathsf{y_u}^{\mathsf{ili2}} \, \mathsf{LF_{2,1,1,-1}} \big[ \widetilde{\mu} \,,\, \mathsf{m_2} \,,\, \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \, - \, \tfrac{3}{4} \, \mathsf{g_3} \, \mathsf{m_2} \, \widetilde{\mu} \, \mathsf{c_{Y}} \, \mathsf{g_2}^2 \, \mathsf{y_u}^{\mathsf{ili2}} \, \mathsf{LF_{2,1,1,0}} \big[ \widetilde{\mu} \,,\, \mathsf{m_2} \,,\, \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \, + \, \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \, + \, \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \, \mathsf{m_{\tilde{q}}}^{\mathsf{
                                                                                                                                                                                                           g_3 \, s_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-2} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{il}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{il}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{il}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{il}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{il}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{il}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{il}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{ili2}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,-1} \big[ \widetilde{\mu} \,, \, m_2 \,, \, m_{\tilde{q}}^{\, \text{ili2}} \big] \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,1} \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,1} \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_2{}^2 \, y_u^{\, \text{ili2}} \, LF_{3,1,1,1} \, + \, \frac{3}{4} \, g_3 \, m_2 \, \widetilde{\mu} \, c_\gamma \, g_3{}^2 \,
                                                                                                                                                                                                           g_{3}\,\widetilde{\mu}\,\,y_{d}^{\,\,\text{ilr}}\,\,y_{u}^{\,\,\text{pi2}}\,\left(c_{\gamma}\,\,\overline{a_{d}}^{\,\,\text{pr}}\,-\,s_{\gamma}\,\widetilde{\mu}\,\,\overline{y_{d}}^{\,\,\text{pr}}\right)\,\,\text{LF}_{2,1,1,0}\!\left[\widetilde{\mu}\,,\,\,m_{\tilde{d}}^{\,\,\,\text{r}}\,,\,\,m_{\tilde{q}}^{\,\,\,\text{p}}\right]\,+\,\,c_{2,1,1,0}\left[\widetilde{\mu}\,,\,\,m_{\tilde{d}}^{\,\,\,\text{r}}\,,\,\,m_{\tilde{d}}^{\,\,\,\text{p}}\right]\,+\,c_{2,1,1,0}\left[\widetilde{\mu}\,,\,\,m_{\tilde{d}}^{\,\,\,\,\text{r}}\,,\,\,m_{\tilde{d}}^{\,\,\,\,\text{p}}\right]
                                                                                                                                                             \frac{1}{2}\;g_{3}\;\widetilde{\mu}\;y_{d}^{\;i1r}\;y_{u}^{\;pi2}\;\left(-\,c_{\gamma}\;\overline{a_{d}}^{pr}\,+\,s_{\gamma}\,\widetilde{\mu}\;\overline{y_{d}}^{pr}\right)\;\mathsf{LF}_{3,1,1,-1}\!\left[\widetilde{\mu}\,,\;\mathfrak{m}_{\tilde{d}}^{\;\;r}\,,\;\mathfrak{m}_{\tilde{q}}^{\;\;p}\right]\right)
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