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C_{\sf uB}^{\sf i1\_i2\_} 
ightarrow
                                   \frac{1}{16\,\pi^{2}}\,\left(-\,\frac{1}{144}\,\,g_{1}\,\,s_{\gamma}\,\,\frac{1}{m_{u}^{2}}\,\left(\overline{y_{d}}^{pr}\,\,y_{d}^{\,ilr}\,\,y_{u}^{\,pi2}\,\left(15\,\,c_{\gamma}^{\,\,2}+7\,\,s_{\gamma}^{\,\,2}\right)\,-\,9\,\,c_{\gamma}^{\,\,2}\,\,\overline{y_{u}}^{pr}\,\left(y_{u}^{\,pi2}\,\,y_{u}^{\,\,ilr}-10\,\,y_{u}^{\,\,pr}\,\,y_{u}^{\,\,ili2}\right)\,\right)\,+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}\,\,y_{u}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,\,2}+\,3\,\,c_{\gamma}^{\,
                                                                                                                                                    \frac{1}{216} \, \, \mathsf{s_{Y}} \, \, \mathsf{g_{1}}^{3} \, \, \mathsf{y_{u}}^{\, \text{iii} \, 2} \, \, \mathsf{LF_{3,1,-1}} \big[ \, \mathsf{m_{1}}, \, \, \mathsf{m_{\tilde{q}}}^{\, \text{ii}} \, \big] \, + \frac{1}{432} \, \, \mathsf{s_{Y}} \, \, \mathsf{g_{1}}^{3} \, \, \mathsf{y_{u}}^{\, \text{iii} \, 2} \, \, \mathsf{LF_{4,1,-2}} \big[ \, \mathsf{m_{1}}, \, \, \mathsf{m_{\tilde{q}}}^{\, \text{ii}} \, \big] \, + \frac{1}{432} \, \, \mathsf{s_{Y}} \, \, \, \mathsf{g_{1}}^{3} \, \, \, \mathsf{y_{u}}^{\, \text{iii} \, 2} \, \, \mathsf{LF_{4,1,-2}} \big[ \, \mathsf{m_{1}}, \, \, \mathsf{m_{\tilde{q}}}^{\, \text{ii}} \, \big] \, + \frac{1}{432} \, \, \, \mathsf{m_{1}}^{\, \text{ii}} \, \, \, \mathsf{m_{2}}^{\, \text{ii}} \, \, \mathsf
                                                                                                                                                    \frac{4}{27} \; \mathsf{s_{Y}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\mathtt{ili2}} \; \mathsf{LF_{2,1,0}} \big[ \mathsf{m_{1}}, \; \mathsf{m_{\tilde{u}}}^{\mathtt{i2}} \big] \; - \; \frac{8}{27} \; \mathsf{s_{Y}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\mathtt{ili2}} \; \mathsf{LF_{3,1,-1}} \big[ \mathsf{m_{1}}, \; \mathsf{m_{\tilde{u}}}^{\mathtt{i2}} \big] \; + \; \mathsf{m_{\tilde{u}}}^{\mathtt{i2}} \big] \; + \; \mathsf{m_{\tilde{u}}}^{\mathtt{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathtt{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathtt{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathtt{i2}} \, 
                                                                                                                                                    \frac{4}{27}\;\mathsf{S}_{\mathsf{Y}}\;\mathsf{g_{1}}^{\mathsf{3}}\;\mathsf{y_{u}}^{\mathsf{ili2}}\;\mathsf{LF_{4,1,-2}}\big[\mathsf{m_{1}},\;\mathsf{m_{\tilde{u}}}^{\mathsf{i2}}\big]\;+\;\frac{1}{16}\;\mathsf{g_{1}}\;\mathsf{S}_{\mathsf{Y}}\;\mathsf{g_{2}}^{\mathsf{2}}\;\mathsf{y_{u}}^{\mathsf{ili2}}\;\mathsf{LF_{2,1,0}}\big[\mathsf{m_{2}},\;\mathsf{m_{\tilde{q}}}^{\mathsf{ili2}}\big]
                                                                                                                                                                                        g_1\,\,s_{\gamma}\,\,g_3^{\,2}\,\,y_u^{\,i\,1\,i\,2}\,\,\mathsf{LF}_{4,1,\,-\,2}\big[\,m_3\,,\,m_{\bar{q}}^{\,\,i\,1}\,\big]\,+\,\tfrac{4}{9}\,\,g_1\,\,s_{\gamma}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\big]\,-\,\frac{4}{9}\,\,g_1^{\,2}\,\,s_{\gamma}^{\,2}\,\,g_3^{\,2}\,\,y_u^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,1,\,0}\,\big[\,m_3\,,\,m_{\bar{u}}^{\,\,i\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2}\,\,g_3^{\,2
                                                                                                                                                                                        g_1\,s_{\gamma}\,g_{3}{}^2\,y_{u}{}^{\text{ili2}}\,LF_{3,1,-1}\big[m_3\,,\,m_{\tilde{u}}{}^{\text{i2}}\big]\,+\,\tfrac{4}{9}\,g_1\,s_{\gamma}\,g_{3}{}^2\,y_{u}{}^{\text{ili2}}\,LF_{4,1,-2}\big[m_3\,,\,m_{\tilde{u}}{}^{\text{i2}}\big]\,-\,\tfrac{4}{9}\,g_1\,s_{\gamma}\,g_{3}{}^2\,y_{u}{}^{\text{ili2}}\,LF_{4,1,-2}\big[m_3\,,\,m_{\tilde{u}}{}^{\text{i2}}\big]\,-\,\tfrac{4}{9}\,g_1\,s_{\gamma}\,g_{3}{}^2\,y_{u}{}^{\text{ili2}}\,g_1\,s_{\gamma}\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{}^2\,g_2{
                                                                                                                                                                                                              g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{2,1,\theta}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,LF_{3,1,-1}\big[\tilde{\mu},\,m_{\tilde{d}}^{\text{-r}}\big]\,+\,\frac{1}{24}\,g_1\,s_\gamma\,\overline{y_d}^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,g_1^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{pr}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{pi2}}\,y_d^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^{\text{ilr}}\,y_u^
                                                                                                                                                                 \frac{1}{24} \; \mathbf{g}_1 \; \mathbf{s}_{\gamma} \; \overline{\mathbf{y_d}}^{\mathsf{pr}} \; \mathbf{y_d}^{\mathsf{ilr}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathsf{LF}_{4,1,-2} \big[ \widetilde{\boldsymbol{\mu}} \; , \; \mathbf{m_{\tilde{d}}}^{\mathsf{r}} \big] \; + \; \frac{1}{12} \; \mathbf{g}_1 \; \mathbf{s}_{\gamma} \; \overline{\mathbf{y_u}}^{\mathsf{pr}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathbf{y_u}^{\mathsf{ilr}} \; \mathsf{LF}_{2,1,0} \big[ \widetilde{\boldsymbol{\mu}} \; , \; \mathbf{m_{\tilde{q}}}^{\mathsf{p}} \big] \; - \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \big[ \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; , \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; ] \; + \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \big[ \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; , \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; ] \; - \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \big[ \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; , \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; ] \; - \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \big[ \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; , \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; ] \; - \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \big[ \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; , \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; ] \; - \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \, ] \; - \; \mathbf{v_{\tilde{d}}}^{\mathsf{pr}} \; ] \; - \; \mathbf{v_{\tilde
                                                                                                                                                    \frac{5}{12} \; \mathbf{g_1} \; \mathbf{s_\gamma} \; \overline{\mathbf{y_u}}^{\mathsf{pr}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathbf{y_u}^{\mathsf{ilr}} \; \mathsf{LF_{3,1,-1}} \big[ \widetilde{\mu} \,, \, \mathbf{m_{\tilde{q}}}^{\mathsf{p}} \big] \; + \; \frac{1}{3} \; \mathbf{g_1} \; \mathbf{s_\gamma} \; \overline{\mathbf{y_u}}^{\mathsf{pr}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathbf{y_u}^{\mathsf{ilr}} \; \mathsf{LF_{4,1,-2}} \big[ \widetilde{\mu} \,, \, \mathbf{m_{\tilde{q}}}^{\mathsf{p}} \big] \; + \; \frac{1}{3} \; \mathbf{g_1} \; \mathbf{s_\gamma} \; \overline{\mathbf{y_u}}^{\mathsf{pr}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathbf{y_u}^{\mathsf{ilr}} \; \mathsf{LF_{4,1,-2}} \big[ \widetilde{\mu} \,, \, \mathbf{m_{\tilde{q}}}^{\mathsf{p}} \big] \; + \; \frac{1}{3} \; \mathbf{g_1} \; \mathbf{s_\gamma} \; \overline{\mathbf{y_u}}^{\mathsf{pr}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathbf{y_u}^{\mathsf{ilr}} \; \mathsf{LF_{4,1,-2}} \big[ \widetilde{\mu} \,, \, \mathbf{m_{\tilde{q}}}^{\mathsf{p}} \big] \; + \; \frac{1}{3} \; \mathbf{g_1} \; \mathbf{s_\gamma} \; \overline{\mathbf{y_u}}^{\mathsf{pr}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathbf{y_u}^{\mathsf{pi2}} \; \mathbf{g_1} \; \mathbf{g_2} \, \mathbf{g_
                                                                                                                                                                                        g_1 \, s_\gamma \, \overline{y_u}^{\text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{ilr}} \, LF_{2,1,\theta} \big[ \widetilde{\mu} \, , \, m_{\widetilde{u}}^{\, \text{r}} \big] \, - \, \frac{5}{24} \, g_1 \, s_\gamma \, \overline{y_u}^{\text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{ilr}} \, LF_{3,1,-1} \big[ \widetilde{\mu} \, , \, m_{\widetilde{u}}^{\, \text{r}} \big] \, + \, \frac{5}{24} \, g_1 \, s_\gamma \, \overline{y_u}^{\, \text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{ilr}} \, LF_{3,1,-1} \big[ \widetilde{\mu} \, , \, m_{\widetilde{u}}^{\, \text{r}} \big] \, + \, \frac{5}{24} \, g_1 \, s_\gamma \, \overline{y_u}^{\, \text{pr}} \, y_u^{\, \text{pi2}} \, y_u^{\, \text{pi3}} \, y_u^{\, \text{pi3}} \, y_u^{\, \text{pi4}} \,
                                                                                                                                                    \frac{1}{24} g_1 s_\gamma \overline{y_u}^{\text{pr}} y_u^{\text{pi2}} y_u^{\text{iir}} LF_{4,1,-2} \big[ \widetilde{\mu}, m_{\widetilde{u}}^{\text{r}} \big] - \frac{5}{108} m_1 g_1^3 \left( s_\gamma a_u^{\text{iii2}} - \widetilde{\mu} c_\gamma y_u^{\text{iii2}} \right)
                                                                                                                                                                               \mathsf{LF_{2,1,1,0}}\big[\,\mathsf{m_{1}}\,,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{1}{72}\,\,\mathsf{m_{1}}\,\,\mathsf{g_{1}}^{3}\,\,\big(\,\mathsf{s_{Y}}\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,-\,\tilde{\mu}\,\,\mathsf{c_{Y}}\,\,\mathsf{y_{u}}^{\,\,\text{i1i2}}\big)\,\,\,\mathsf{LF_{2,2,1,-1}}\big[\,\mathsf{m_{1}}\,,\,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{1}{72}\,\,\mathsf{m_{1}}\,\,\mathsf{g_{1}}^{3}\,\,\,(\,\mathsf{s_{Y}}\,\,\mathsf{a_{u}}^{\,\,\text{i1i2}}\,-\,\tilde{\mu}\,\,\mathsf{c_{Y}}\,\,\mathsf{y_{u}}^{\,\,\text{i1i2}}\big)\,\,\,\mathsf{LF_{2,2,1,-1}}\big[\,\mathsf{m_{1}}\,,\,\,\mathsf{m_{\tilde{q}}}^{\,\,\text{i1}}\,,\,\,\mathsf{m_{\tilde{u}}}^{\,\,\text{i2}}\,\big]\,+\,\frac{1}{72}\,\,\mathsf{m_{1}}\,\,\mathsf{g_{1}}^{3}\,\,\,\mathsf{m_{1}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,\mathsf{m_{2}}^{3}\,\,
                                                                                                                                                                                                                                [\mathbf{m_1} \ \mathbf{g_1}^3 \ (\mathbf{s_{\Upsilon}} \ \mathbf{a_u}^{\mathtt{ili2}} - \tilde{\mu} \ \mathbf{c_{\Upsilon}} \ \mathbf{y_u}^{\mathtt{ili2}}) \ \mathsf{LF_{3,1,1,-1}} [\mathbf{m_1}, \ \mathbf{m_{\tilde{q}}}^{\mathtt{il}}, \ \mathbf{m_{\tilde{u}}}^{\mathtt{i2}}] - 
                                                                                                                                                                                                     \left[ s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{1,1,1,0} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}^{-i1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1,-1} \left[ m_{1}, m_{\tilde{q}}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{3} y_{u}^{i1i2} LF_{2,1,1} \left[ m_{1}, m_{1}, \tilde{\mu} \right] + \frac{1}{36} s_{\gamma} g_{1}^{2} y_{u}^{i1} + \frac{1}{36} s_
                                                                                                                                                                                                     \left[ \text{ } \textbf{m}_{1} \ \tilde{\mu} \ \textbf{c}_{\gamma} \ \textbf{g}_{1}^{\ 3} \ \textbf{y}_{u}^{\ i \ 1 \ i \ 2} \ \textbf{LF}_{2,1,1,0} \left[ \textbf{m}_{1} \text{, } \textbf{m}_{\tilde{q}}^{\ i \ 1} \text{, } \tilde{\mu} \right] - \frac{1}{72} \ \textbf{s}_{\gamma} \ \textbf{g}_{1}^{\ 3} \ \textbf{y}_{u}^{\ i \ 1 \ i \ 2} \ \textbf{LF}_{3,1,1,-2} \left[ \textbf{m}_{1} \text{, } \textbf{m}_{\tilde{q}}^{\ i \ 1} \text{, } \tilde{\mu} \right] - \frac{1}{72} \ \textbf{s}_{\gamma} \ \textbf{g}_{1}^{\ 3} \ \textbf{y}_{u}^{\ i \ 1 \ i \ 2} \ \textbf{LF}_{3,1,1,-2} \left[ \textbf{m}_{1} \text{, } \textbf{m}_{\tilde{q}}^{\ i \ 1} \text{, } \tilde{\mu} \right] - \frac{1}{72} \ \textbf{m}_{1} \ \textbf{m}_{1}^{\ i \ 1} \ \textbf{m}_{2}^{\ i \ 1} \ \textbf{m}_{2}^{
                                                                                                                                                                 \frac{1}{72} m_1 \, \widetilde{\mu} \, c_{\gamma} \, g_1^{3} \, y_u^{i1i2} \, \mathsf{LF}_{3,1,1,-1} \big[ m_1, \, m_{\widetilde{q}}^{i1}, \, \widetilde{\mu} \big] +
                                                                                                                                                                                                          \mathsf{m_1} \; \mathsf{g_1}^3 \; \left( - \, \mathsf{s_{\gamma}} \; \mathsf{a_u}^{\, \texttt{ili2}} + \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{y_u}^{\, \texttt{ili2}} \right) \; \mathsf{LF_{2,2,1,-1}} \big[ \, \mathsf{m_1} \, , \; \mathsf{m_{\bar{u}}^{\, \texttt{il}}}^2 \, , \; \mathsf{m_{\bar{q}}^{\, \texttt{il}}} \big] \; + \\
                                                                                                                                                                                   \mathsf{s_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{1,1,1,0}} \big[ \mathsf{m_{1}}, \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}}, \; \widetilde{\mu} \big] \; - \; \tfrac{4}{9} \; \mathsf{s_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{2,1,1,-1}} \big[ \mathsf{m_{1}}, \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}}, \; \widetilde{\mu} \big] \; - \; \mathtt{m_{\tilde{u}}}^{\mathsf{i2}}, \; \widetilde{\mu} \big] \; - \; \mathtt{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}}, \; \widetilde{\mu} \big] \; - \; \mathtt{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}}, \; \widetilde{\mu} \big] \; - \; \mathtt{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}}, \; \widetilde{\mu} \big] \; - \; \mathtt{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}}, \; \widetilde{\mu} \big] \; - \; \mathtt{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{u}}}^
                                                                                                                                                    \frac{2}{9} \,\, \mathsf{m_1} \,\, \widetilde{\mu} \,\, \mathsf{c_{Y}} \,\, \mathsf{g_{1}}^{3} \,\, \mathsf{y_u}^{\,\, \mathsf{ili2}} \,\, \mathsf{LF_{2,1,1,0}} \big[ \, \mathsf{m_1} \,, \,\, \mathsf{m_{\tilde{u}}}^{\,\, \mathsf{i2}} \,, \,\, \widetilde{\mu} \, \big] \,\, + \, \frac{2}{9} \,\, \mathsf{s_{Y}} \,\, \mathsf{g_{1}}^{3} \,\, \mathsf{y_u}^{\,\, \mathsf{ili2}} \,\, \mathsf{LF_{3,1,1,-2}} \big[ \, \mathsf{m_1} \,, \,\, \mathsf{m_{\tilde{u}}}^{\,\, \mathsf{i2}} \,, \,\, \widetilde{\mu} \, \big] \,\, + \, \frac{2}{9} \,\, \mathsf{s_{Y}} \,\, \mathsf{g_{1}}^{3} \,\, \mathsf{y_u}^{\,\, \mathsf{ili2}} \,\, \mathsf{LF_{3,1,1,-2}} \big[ \, \mathsf{m_1} \,, \,\, \mathsf{m_{\tilde{u}}}^{\,\, \mathsf{i2}} \,, \,\, \widetilde{\mu} \, \big] \,\, + \, \frac{2}{9} \,\, \mathsf{m_{1}} \,\, \mathsf{m_{1}} \,\, \mathsf{m_{1}}^{\,\, \mathsf{i2}} \,\, \mathsf{LF_{3,1,1,-2}} \big[ \, \mathsf{m_{1}} \,, \,\, \mathsf{m_{\tilde{u}}}^{\,\, \mathsf{i2}} \,, \,\, \widetilde{\mu} \, \big] \,\, + \, \frac{2}{9} \,\, \mathsf{m_{1}} \,\, \mathsf{m_{2}} \,\, \mathsf{m_{2}}^{\,\, \mathsf{i3}} \,\, \mathsf{LF_{3,1,1,-2}} \big[ \, \mathsf{m_{1}} \,, \,\, \mathsf{m_{\tilde{u}}}^{\,\, \mathsf{i2}} \,, \,\, \widetilde{\mu} \, \big] \,\, + \, \frac{2}{9} \,\, \mathsf{m_{2}} \,\, \mathsf{m_{2}}^{\,\, \mathsf{i3}} \,\, \mathsf{m_{2}}^{\,\, \mathsf{i3}} \,\, \mathsf{LF_{3,1,1,-2}} \big[ \, \mathsf{m_{1}} \,, \,\, \mathsf{m_{\tilde{u}}}^{\,\, \mathsf{i2}} \,, \,\, \widetilde{\mu} \, \big] \,\, + \, \frac{2}{9} \,\, \mathsf{m_{2}}^{\,\, \mathsf{i3}} \,\, \mathsf{m_{2}}^{\,\, \mathsf{i3}} \,\, \mathsf{m_{2}}^{\,\, \mathsf{i3}} \,, \,\, \widetilde{\mu_{1}}^{\,\, \mathsf{i3}} \,, \,\, \widetilde{\mu_{1}}^{\,\, \mathsf{i3}} \,\, \mathsf{m_{2}}^{\,\, \mathsf{i3}} \,, \,\, \widetilde{\mu_{1}}^{\,\, \mathsf{i3}
                                                                                                                                                                                        \mathsf{m_{1}}\;\tilde{\mu}\;\mathsf{c_{\gamma}}\;\mathsf{g_{1}}^{3}\;\mathsf{y_{u}}^{\text{ili2}}\;\mathsf{LF_{3,1,1,-1}}\big[\mathsf{m_{1}},\;\mathsf{m_{\tilde{u}}}^{\text{i2}},\;\tilde{\mu}\big]\;-\;\frac{5}{144}\;\mathsf{s_{\gamma}}\;\mathsf{g_{1}}^{3}\;\mathsf{y_{u}}^{\text{ili2}}\;\mathsf{LF_{2,2,1,-2}}\big[\mathsf{m_{1}},\;\tilde{\mu},\;\mathsf{m_{\tilde{q}}}^{\text{il}}\big]\;-\;\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}}}^{\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}
                                                                                                                                                                                                                            \left[m_{1}\,\widetilde{\mu}\,c_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-1}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{q}}^{\,i\,1}
ight]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}
ight]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}
ight]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+rac{5}{36}\,s_{\gamma}\,g_{1}^{3}\,y_{u}^{\,i\,1\,i\,2}\,\mathsf{LF}_{2,2,2,1,-2}\!\left[m_{1},\,\widetilde{\mu},\,m_{ar{u}}^{\,i\,2}\right]+\frac{5}{36}\,s_{\gamma}\,g_{1}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{u}^{\,i\,2}\,y_{
                                                                                                                                                    \frac{5}{36} \; \mathsf{m_1} \; \tilde{\mu} \; \mathsf{c_{Y}} \; \mathsf{g_1}^3 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{2,2,1,-1}} \big[ \mathsf{m_1}, \; \tilde{\mu}, \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \big] \; + \; \frac{1}{8} \; \mathsf{g_1} \; \mathsf{s_{Y}} \; \mathsf{g_2}^2 \; \mathsf{y_u}^{\mathsf{ili2}} \; \mathsf{LF_{1,1,1,0}} \big[ \mathsf{m_2}, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}}, \; \tilde{\mu} \big] \; - \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \; + \; \mathsf{m_{\tilde{q}}}^{\mathsf{
                                                                                                                                                    \frac{1}{8}\;g_{1}\;s_{\gamma}\;g_{2}^{\;2}\;y_{u}^{\;i\,1\,i\,2}\;\mathsf{LF}_{3,1,1,-2}\!\left[\mathsf{m}_{2}\;,\;\mathsf{m}_{\tilde{\mathsf{q}}}^{\;i\,1}\;,\;\widetilde{\mu}\right]\;+\;\frac{1}{8}\;g_{1}\;\mathsf{m}_{2}\;\widetilde{\mu}\;\mathsf{c}_{\gamma}\;g_{2}^{\;2}\;y_{u}^{\;i\,1\,i\,2}\;\mathsf{LF}_{3,1,1,-1}\!\left[\mathsf{m}_{2}\;,\;\mathsf{m}_{\tilde{\mathsf{q}}}^{\;i\,1}\;,\;\widetilde{\mu}\right]\;+\;\frac{1}{8}\;g_{1}\;\mathsf{m}_{2}\;\widetilde{\mu}\;\mathsf{c}_{\gamma}\;g_{2}^{\;2}\;\mathsf{c}_{\gamma}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2}\;\mathsf{d}_{2}^{\;2
                                                                                                                                                                                                              g_{1}\,\,s_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,-2}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,+\,\frac{5}{16}\,\,g_{1}\,\,\mathsf{m}_{2}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,-1}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,+\,\frac{5}{16}\,\,g_{1}\,\,\mathsf{m}_{2}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,-1}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,+\,\frac{5}{16}\,\,g_{1}\,\,\mathsf{m}_{2}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,-1}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,+\,\frac{5}{16}\,\,g_{1}\,\,\mathsf{m}_{2}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,-1}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,+\,\frac{5}{16}\,\,g_{1}\,\,\mathsf{m}_{2}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,-1}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,+\,\frac{5}{16}\,\,g_{1}\,\,\mathsf{m}_{2}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,1,\,-1}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,+\,\frac{5}{16}\,\,g_{1}\,\,\mathsf{m}_{2}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,g_{2}^{\,\,2}\,\,y_{u}^{\,\,i\,1\,i\,2}\,\,\mathsf{LF}_{2,\,2,\,1,\,1,\,-1}\left[\,\mathsf{m}_{2}\,,\,\,\widetilde{\mu}\,,\,\,\mathsf{m}_{\tilde{q}}^{\,\,i\,1}\,\right]\,
                                                                                                                                                                                            g_{1}\;m_{3}\;g_{3}^{\;2}\;\left(-\;s_{\gamma}\;a_{u}^{\;\;i1i2}\;+\;\widetilde{\mu}\;c_{\gamma}\;y_{u}^{\;\;i1i2}\right)\;\mathsf{LF}_{2,1,1,0}\left[\;m_{3}\;,\;m_{\tilde{q}}^{\;\;i1}\;,\;m_{\tilde{u}}^{\;\;i2}\;\right]\;+
                                                                                                                                                                                        g_{1}\;m_{3}\;g_{3}^{\;2}\;\left(s_{\gamma}\;a_{u}^{\;i\,1i\,2}-\widetilde{\mu}\;c_{\gamma}\;y_{u}^{\;i\,1i\,2}\right)\;\mathsf{LF}_{2,2,1,-1}\!\left[m_{3}\;,\;m_{\tilde{q}}^{\;i\,1}\;,\;m_{\tilde{u}}^{\;i\,2}\right]\;+
                                                                                                                                                                                            {\rm g_1} \; {\rm m_3} \; {\rm g_3}^2 \; \left( {\rm s_{_Y}} \; {\rm a_u}^{\rm ili2} - \tilde{\mu} \; {\rm c_{_Y}} \; {\rm y_u}^{\rm ili2} \right) \; {\rm LF_{3,1,1,-1}} \big[ \, {\rm m_3} \, , \; {\rm m_{\tilde{q}}}^{\rm il} \, , \; {\rm m_{\tilde{u}}}^{\rm il} \big] \; + \\
                                                                                                                                                                                                 {\rm g_1} \; {\rm m_3} \; {\rm g_3}^2 \; \left( - \, {\rm s_{_Y}} \; {\rm a_u}^{\, \text{ili2}} + \widetilde{\mu} \; {\rm c_{_Y}} \; {\rm y_u}^{\, \text{ili2}} \right) \; {\rm LF_{2,2,1,,-1}} \big[ \, {\rm m_3} \, , \; {\rm m_{\tilde{u}}}^{\, \text{il}} \, , \; {\rm m_{\tilde{q}}}^{\, \text{il}} \, \big] \; + \\
                                                                                                                                                                                                                   \mathsf{g_1}\; \tilde{\boldsymbol{\mu}}\; \mathsf{y_d}^{\texttt{ilr}}\; \mathsf{y_u}^{\texttt{pi2}}\; \left(-\,\mathsf{c_{\scriptscriptstyle Y}}\; \overline{\mathsf{a_d}}^{\texttt{pr}} + \mathsf{s_{\scriptscriptstyle Y}}\; \tilde{\boldsymbol{\mu}}\; \overline{\mathsf{y_d}}^{\texttt{pr}}\right) \; \mathsf{LF_{2,2,1,-1}} \left[\,\boldsymbol{m_{\bar{d}}}^{\texttt{-r}}\,,\; \tilde{\boldsymbol{\mu}}\,,\; \boldsymbol{m_{\bar{q}}}^{\texttt{-p}}\,\right] \; + \; \mathsf{a_{\scriptscriptstyle Y}}\; \boldsymbol{\mu} \; \boldsymbol{\mu} \;
                                                                                                                                                                                                              \frac{5}{72} \; \mathsf{S}_{\mathsf{Y}} \; \mathsf{g_{1}}^{\mathsf{3}} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{2,1,1,-1}} \big[ \widetilde{\mu} \,, \; \mathsf{m_{1}} \,, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; + \; \frac{1}{72} \; \mathsf{m_{1}} \; \widetilde{\mu} \; \mathsf{c_{\mathsf{Y}}} \; \mathsf{g_{1}}^{\mathsf{3}} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{2,1,1,0}} \big[ \widetilde{\mu} \,, \; \mathsf{m_{1}} \,, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \mathsf{m_{1}} \; \widetilde{\mu} \; \mathsf{c_{\mathsf{Y}}} \; \mathsf{g_{1}}^{\mathsf{3}} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{2,1,1,0}} \big[ \widetilde{\mu} \,, \; \mathsf{m_{1}} \,, \; \mathsf{m_{\tilde{q}}}^{\mathsf{il}} \big] \; - \; \mathsf{m_{1}} \; \mathsf{m_{2}} \; \mathsf{m_{2}} \; \mathsf{m_{2}} \; \mathsf{m_{3}} \; \mathsf{m_{2}} \; \mathsf{m_{3}} \; \mathsf{m_
                                                                                                                                                                                                              \mathsf{s_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\texttt{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \tilde{\mu} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{q}}}^{\texttt{il}} \big] \; - \; \frac{1}{18} \; \mathsf{m_{1}} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\texttt{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{q}}}^{\texttt{il}} \big] \; - \; \frac{1}{18} \; \mathsf{m_{1}} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\texttt{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{q}}}^{\texttt{il}} \big] \; - \; \frac{1}{18} \; \mathsf{m_{1}} \; \tilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\texttt{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \tilde{\mu} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{q}}}^{\texttt{il}} \big] \; - \; \frac{1}{18} \; \mathsf{m_{1}} \; \mathsf{m_{2}} \; \mathsf{d_{2}} \; \mathsf{d_{2}} \; \mathsf{d_{2}} \; \mathsf{d_{2}} \; \mathsf{d_{2}} \, \mathsf{d_{2}} \; \mathsf{d_{2
                                                                                                                                                                                                          \mathsf{s_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{2,1,1,-1}} \big[ \, \widetilde{\mu} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \big] \; - \; \frac{2}{9} \; \mathsf{m_{1}} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_{1}}^{3} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{2,1,1,0}} \big[ \, \widetilde{\mu} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \big] \; + \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \, \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \, \mathsf{m_{2}} \, , \; \mathsf{m_{2}}^{\mathsf{i2}} \, , \; \mathsf{m_{2}}^{\mathsf{
                                                                                                                                                                                                          \mathsf{s_{\gamma}} \; \mathsf{g_{1}}^{\mathsf{3}} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-2}} \big[ \, \widetilde{\boldsymbol{\mu}} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \big] \; + \; \frac{1}{18} \; \mathsf{m_{1}} \; \widetilde{\boldsymbol{\mu}} \; \mathsf{c_{\gamma}} \; \mathsf{g_{1}}^{\mathsf{3}} \; \mathsf{y_{u}}^{\mathsf{ili2}} \; \mathsf{LF_{3,1,1,-1}} \big[ \, \widetilde{\boldsymbol{\mu}} \, , \; \mathsf{m_{1}} \, , \; \mathsf{m_{\tilde{u}}}^{\mathsf{i2}} \big] \; - \; \mathbf{1}^{\mathsf{a}} \; \mathsf{m_{1}} \; \mathsf{m_{2}}^{\mathsf{a}} \; \mathsf{m_{2}} \; \mathsf{m_{2}} \; \mathsf{m_{2}}^{\mathsf{a}} \; \mathsf{m_{2}} \; \mathsf{m_{2}}^{\mathsf{a}} \; \mathsf{m_{2}} \; \mathsf{m_{2
                                                                                                                                                    \frac{5}{8}\;g_{1}\;s_{\gamma}\;g_{2}^{\;2}\;y_{u}^{\;i\,1\,i\,2}\;LF_{2,\,1,\,1,\,-\,1}\big[\,\widetilde{\mu}\,,\;m_{2}\,,\;m_{\tilde{q}}^{\;i\,1}\,\big]\,-\,\frac{1}{8}\;g_{1}\;m_{2}\;\widetilde{\mu}\;c_{\gamma}\;g_{2}^{\;2}\;y_{u}^{\;i\,1\,i\,2}\;LF_{2,\,1,\,1,\,0}\big[\,\widetilde{\mu}\,,\;m_{2}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{\tilde{q}}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;0}\,,\;m_{2}^{\;
                                                                                                                                                                                        g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, 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{1}{2} \, g_1 \, m_2 \, \widetilde{\mu} \, c_{\gamma} \, g_1^2 \, g_2^2 \, g_2^2 \, g_1^2 
                                                                                                                                                                                                                   g_{1}\,\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]\,+\,3\,\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{r}}\,\right]\,+\,3\,\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{r}}\,,\,\,m_{\tilde{q}}^{\,\,\,\text{r}}\,\right]
                                                                                                                                                                                                              g_{1}\,\widetilde{\mu}\,\,y_{d}^{\,\,\textbf{ilr}}\,\,y_{u}^{\,\,\textbf{pi2}}\,\left(-\,c_{\gamma}\,\,\overline{a_{d}}^{\,\,\textbf{pr}}\,+\,s_{\gamma}\,\widetilde{\mu}\,\,\overline{y_{d}}^{\,\,\textbf{pr}}\right)\,\,LF_{3,\textbf{1},\textbf{1},\textbf{-1}}\!\left[\,\widetilde{\mu}\,,\,\,\textbf{m}_{\bar{d}}^{\,\,\,\textbf{r}}\,,\,\,\textbf{m}_{\bar{q}}^{\,\,\,\textbf{p}}\,\right]\right)
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