```
C_{le}^{i1}_{-i2}_{-i3}_{-i4}^{-i4} \rightarrow -\frac{1}{2} \frac{1}{m_0^2} s_\gamma^2 \overline{y_e}^{i2i3} y_e^{i1i4} +
                                         \hbar \ \left(-\frac{1}{144} \ \frac{1}{m_{\text{o}}^2} \ \text{S}_{\text{y}}^{\ 2} \ \left(36 \ \overline{\text{y}_{\text{e}}}^{\text{i2i3}} \ \text{y}_{\text{e}}^{\text{i1i4}} \ \left(8 \ \text{g}_{\text{1}}^{\ 2} + 3 \ \text{g}_{\text{2}}^{\ 2}\right) \right. \\ \left. + 9 \ \overline{\text{y}_{\text{e}}}^{\text{pr}} \ \overline{\text{y}_{\text{e}}}^{\text{i2i3}} \ \left(3 \ \text{y}_{\text{e}}^{\text{pi4}} \ \text{y}_{\text{e}}^{\text{i1r}} \ \left(1 + \text{s}_{\text{y}}^{\ 2}\right) \right. \\ \left. - \frac{1}{144} \ \frac{1}{m_{\text{o}}^2} \ \text{s}_{\text{y}}^{\ 2} \ \left(36 \ \overline{\text{y}_{\text{e}}}^{\text{i2i3}} \ \text{y}_{\text{e}}^{\text{i1r}} \ \left(1 + \text{s}_{\text{y}}^{\ 2}\right) \right) \right] \\ \left. - \frac{1}{144} \ \frac{1}{m_{\text{o}}^2} \ \text{s}_{\text{y}}^{\ 2} \ \left(36 \ \overline{\text{y}_{\text{e}}}^{\text{i2i3}} \ \text{y}_{\text{e}}^{\text{i1r}} \ \left(1 + \text{s}_{\text{y}}^{\ 2}\right) \right) \right] \\ \left. - \frac{1}{144} \ \frac{1}{m_{\text{o}}^2} \ \text{s}_{\text{y}}^{\ 2} \ \left(36 \ \overline{\text{y}_{\text{e}}}^{\text{i2i3}} \ \text{y}_{\text{e}}^{\text{i1r}} \ \left(1 + \text{s}_{\text{y}}^{\ 2}\right) \right) \right] \\ \left. - \frac{1}{144} \ \frac{1}{m_{\text{o}}^2} \ \text{s}_{\text{y}}^{\ 2} \ \left(36 \ \overline{\text{y}_{\text{e}}}^{\text{i2i3}} \ \text{y}_{\text{e}}^{\text{i1r}} \ \left(1 + \text{s}_{\text{y}}^{\ 2}\right) \right) \right] \\ \left. - \frac{1}{144} \ \frac{1}{m_{\text{o}}^2} \ \frac{1
                                                                                                                                                                                                                                                                                                                                                                  8\;{c_{\gamma}}^2\;{y_e}^{\text{pr}}\;{y_e}^{\text{ili4}}\big)\;+\;27\;\overline{y_e}^{\text{ri3}}\;\overline{y_e}^{\text{i2p}}\;\left(4\;{c_{\gamma}}^2\;{y_e}^{\text{ri4}}\;{y_e}^{\text{i1p}}\;+\;{y_e}^{\text{rp}}\;{y_e}^{\text{i1i4}}\;\left(1+{s_{\gamma}}^2\right)\right)\;+\;
                                                                                                                                                                                                                                                                       2\;g_{1}^{\;2}\;\left(5\;\overline{y_{e}}^{\text{pi3}}\;y_{e}^{\;\text{pi4}}\;\delta_{\text{ili2}}+7\;\overline{y_{e}}^{\text{i2p}}\;y_{e}^{\;\text{i1p}}\;\delta_{\text{i3i4}}\right)\right) \; -\frac{1}{4}\;\sum_{p}\;s_{\gamma}\;g_{1}^{\;2}\;\frac{1}{m_{\varrho}^{\;4}}\;\overline{y_{e}}^{\text{i2i3}}
                                                                                                                                                                   {y_e}^{\text{ili4}} \ (2 \ s_{2 \, \text{\upomega}} \ c_{\text{\upomega}} + s_{\text{\upomega}} \ c_{2 \, \text{\upomega}}) \ LF_{1,0} \Big[ \ m_{d}^{\, \text{\upomega}} \Big] \ + \frac{2}{27} \ \sum_{p} \ g_{1}^{\ 4} \ LF_{3,0} \Big[ \ m_{d}^{\, \text{\upomega}} \Big] \ \delta_{\text{ili2}} \ \delta_{\text{i3i4}} \ - \frac{1}{2} \ \delta_{\text{i3i4}} \ + \frac{1}{
                                                                                                                                                    \frac{5}{36} \, \sum_{\mathbf{p}} \, \mathbf{g_1}^4 \, \, \mathsf{LF_{4,-1}} \big[ \, \mathbf{m_{\tilde{d}}}^{\, \mathbf{p}} \big] \, \, \delta_{\mathsf{i} \mathsf{1} \mathsf{i} \mathsf{2}} \, \, \delta_{\mathsf{i} \mathsf{3} \mathsf{i} \mathsf{4}} \, + \, \frac{8}{135} \, \sum_{\mathbf{p}} \, \mathbf{g_1}^4 \, \, \mathsf{LF_{5,-2}} \big[ \, \mathbf{m_{\tilde{d}}}^{\, \mathbf{p}} \big] \, \, \delta_{\mathsf{i} \mathsf{1} \mathsf{i} \mathsf{2}} \, \, \delta_{\mathsf{i} \mathsf{3} \mathsf{i} \mathsf{4}} \, - \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1} \mathsf{2}} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{3} \mathsf{1} \mathsf{4}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{1} \mathsf{1}} \, + \, \frac{1}{100} \, \, \delta_{\mathsf{1} \mathsf{
                                                                                                                                                \frac{3}{2} \ S_{\gamma} \ \frac{1}{m_{\text{o}}^4} \ \overline{y_d}^{\text{pr}} \ y_d^{\text{pr}} \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \left( - \, S_{2\,\gamma} \ C_{\gamma} + S_{\gamma}^{\ 3} \right) \ \mathsf{LF}_{\text{1,0}} \left[ \, m_{\overset{\cdot}{d}}^{\, -} \, \right] \ -
                                                                                                                                                \frac{1}{4} \, \sum_{p} \, s_{\gamma} \, g_{1}^{2} \, \frac{1}{m_{e}^{4}} \, \overline{y_{e}}^{i2i3} \, y_{e}^{i1i4} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{2 \, \gamma}\right) \, LF_{1,0} \left[m_{e}^{\, p}\right] \, + \frac{2}{9} \, \sum_{p} g_{1}^{\, 4} \, LF_{3,0} \left[m_{\tilde{e}}^{\, p}\right] \, \delta_{i1i2} \, \delta_{i3i4} \, - \frac{1}{9} \, \left[m_{\tilde{e}}^{\, p}\right] \, \delta_{i1i2} \, \delta_{i3i4} \, - \frac{1}{9} \, \left[m_{\tilde{e}}^{\, p}\right] \, \delta_{i1i2} \, \delta_{i3i4} \, - \frac{1}{9} \, \left[m_{\tilde{e}}^{\, p}\right] \, \delta_{i1i2} \, \delta_{i3i4} \, - \frac{1}{9} \, \left[m_{\tilde{e}}^{\, p}\right] \, \delta_{i1i2} \, \delta_{i3i4} \, - \frac{1}{9} \, \left[m_{\tilde{e}}^{\, p}\right] \, \delta_{i1i2} \, \delta_{i3i4} \, - \frac{1}{9} \, \left[m_{\tilde{e}}^{\, p}\right] \, \delta_{i1i2} \, \delta_{i1i2} \, \delta_{i1i4} \, \delta_{
                                                                                                                                                \frac{5}{12} \, \sum_{p} \, {g_{1}}^{4} \, \mathsf{LF}_{4,-1} \big[ \, \mathsf{m}_{e}^{-p} \, \big] \, \, \delta_{\mathsf{1112}} \, \, \delta_{\mathsf{1314}} \, + \, \frac{8}{45} \, \sum_{p} \, {g_{1}}^{4} \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{e}^{-p} \, \big] \, \, \delta_{\mathsf{1112}} \, \, \delta_{\mathsf{1314}} \, - \, \delta_{\mathsf{1314}} \, \, \delta_{\mathsf{1314}} \, + \, \frac{8}{45} \, \sum_{p} \, g_{1}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{e}^{-p} \, \big] \, \, \delta_{\mathsf{1112}} \, \, \delta_{\mathsf{1314}} \, - \, \delta_{\mathsf{1314}} \, + \, \frac{8}{45} \, \sum_{p} \, g_{1}^{4} \, \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{e}^{-p} \, \big] \, \, \delta_{\mathsf{1112}} \, \, \delta_{\mathsf{1314}} \, - \, \delta_{\mathsf{1314}} \, + \, \frac{8}{45} \, \sum_{p} \, g_{1}^{4} \, \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{e}^{-p} \, \big] \, \, \delta_{\mathsf{1112}} \, \, \delta_{\mathsf{1314}} \, - \, \delta_{\mathsf{1314}} \, + \, \frac{8}{45} \, \sum_{p} \, g_{1}^{4} \, \, \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{e}^{-p} \, \big] \, \, \delta_{\mathsf{1112}} \, \, \delta_{\mathsf{1314}} \, - \, \delta_{\mathsf{1314}} \, + \, \delta_{\mathsf{1314}} \, \, \delta_{\mathsf{1314}
                                                                                                                                                \frac{1}{4} \; s_{\gamma} \; \frac{1}{m_{0}^{4}} \; \overline{y_{e}}^{\text{i2i3}} \; y_{e}^{\; \text{i1i4}} \; \left( 2 \; \overline{y_{e}}^{\text{pr}} \; y_{e}^{\; \text{pr}} \; \left( s_{2 \, \gamma} \; c_{\gamma} - s_{\gamma}^{\; 3} \right) \; + \\ \sum_{p} \; g_{1}^{\; 2} \; \left( 2 \; s_{2 \, \gamma} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \right) \; LF_{1,0} \left[ m_{\tilde{l}}^{\; p} \right] \; + \\ \sum_{p} \; m_{p}^{\; 2} \; \left( 2 \; s_{2 \, \gamma} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \right) \; LF_{1,0} \left[ m_{\tilde{l}}^{\; p} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right] \; + \\ \sum_{p} \; m_{p}^{\; 2} \; \left( 2 \; s_{2 \, \gamma} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; + \\ \sum_{p} \; m_{p}^{\; 2} \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; + \\ \sum_{p} \; m_{p}^{\; 2} \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{2 \, \gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \; \left( 2 \; m_{p}^{\; 2} \; c_{\gamma} + s_{\gamma} \; c_{\gamma} \right) \;
                                                                                                                                                \frac{4}{45}\, \sum_{p}\, {g_{1}}^{4}\, LF_{5,-2}\big[m_{\bar{l}}^{\;p}\big]\,\, \delta_{\dot{1}\dot{1}\dot{1}}^{2}\, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}}^{} - \frac{1}{4}\,\, s_{\gamma}\, \frac{1}{m_{s}^{\;4}}\,\, \overline{y_{e}}^{\dot{1}\dot{2}\dot{1}\dot{3}}\,\, y_{e}^{\dot{1}\dot{1}\dot{1}\dot{4}}
                                                                                                                                                                               \left(6\;\overline{y_{d}}^{pr}\;y_{d}^{pr}\;\left(-\,s_{2\,\gamma}\;c_{\gamma}+\,s_{\gamma}^{\;3}\right)\,+\,6\;c_{\gamma}\;\overline{y_{u}}^{pr}\;y_{u}^{\;pr}\;\left(\,s_{2\,\gamma}+\,s_{\gamma}\;c_{\gamma}\right)\right.\\ \left.+\,\sum_{p}\;g_{1}^{\;2}\;\left(\,2\;s_{2\,\gamma}\;c_{\gamma}+\,s_{\gamma}\;c_{2\,\gamma}\right)\right)\left(\,s_{2\,\gamma}^{\;2}+\,s_{\gamma}^{\;2}\,c_{\gamma}^{\;2}+\,s_{\gamma}^{\;2}\,c_{\gamma}^{\;2}+\,s_{\gamma}^{\;2}\,c_{\gamma}^{\;2}\right)
                                                                                                                                                                       \frac{1}{2} \, \sum_{p} \, s_{\gamma} \, g_{1}^{2} \, \frac{1}{m_{_{0}}^{4}} \, \overline{y_{e}}^{i2i3} \, y_{e}^{\,i1i4} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{2 \, \gamma}\right) \, LF_{1,0} \left[m_{\tilde{u}}^{\,\,p}\right] \\ + \frac{8}{27} \, \sum_{p} \, g_{1}^{\,\,4} \, LF_{3,0} \left[m_{\tilde{u}}^{\,\,p}\right] \, \delta_{i1i2} \, \delta_{i3i4} - \frac{1}{2} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{2 \, \gamma}\right) \, LF_{1,0} \left[m_{\tilde{u}}^{\,\,p}\right] \\ + \frac{8}{27} \, \sum_{p} \, g_{1}^{\,\,4} \, LF_{3,0} \left[m_{\tilde{u}}^{\,\,p}\right] \, \delta_{i1i2} \, \delta_{i3i4} - \frac{1}{2} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{2 \, \gamma}\right) \, LF_{1,0} \left[m_{\tilde{u}}^{\,\,p}\right] \\ + \frac{8}{27} \, \sum_{p} \, g_{1}^{\,\,4} \, LF_{3,0} \left[m_{\tilde{u}}^{\,\,p}\right] \, \delta_{i1i2} \, \delta_{i3i4} - \frac{1}{2} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{2 \, \gamma}\right) \, LF_{1,0} \left[m_{\tilde{u}}^{\,\,p}\right] \\ + \frac{8}{27} \, \sum_{p} \, g_{1}^{\,\,4} \, LF_{3,0} \left[m_{\tilde{u}}^{\,\,p}\right] \, \delta_{i1i2} \, \delta_{i3i4} - \frac{1}{2} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{2 \, \gamma}\right) \, LF_{1,0} \left[m_{\tilde{u}}^{\,\,p}\right] \\ + \frac{8}{27} \, \sum_{p} \, g_{1}^{\,\,2} \, LF_{3,0} \left[m_{\tilde{u}}^{\,\,p}\right] \, \delta_{i1i2} \, \delta_{i3i4} - \frac{1}{2} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{2 \, \gamma}\right) \, LF_{1,0} \left[m_{\tilde{u}}^{\,\,p}\right] \\ + \frac{8}{27} \, \sum_{p} \, g_{1}^{\,\,p} \, \left(2 \, s_{2 \, \gamma} \, c_{\gamma} + s_{\gamma} \, c_{\gamma} + s_{\gamma} \, c_{\gamma}\right) \, LF_{1,0} \left[m_{\tilde{u}}^{\,\,p}\right] + \frac{8}{27} \, \sum_{p} \, g_{1}^{\,\,p} \, c_{\gamma} + s_{\gamma} \, c_{\gamma} + 
                                                                                                                                                \frac{5}{9} \, \sum_{p} \, {g_{1}}^{4} \, \mathsf{LF_{4,-1}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, + \, \frac{32}{135} \, \sum_{p} \, {g_{1}}^{4} \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i3i4}} \, - \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i1i2}} \, \delta_{\mathsf{i1i3}} \, + \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \mathsf{LF_{5,-2}} \big[ \, \mathsf{m_{u}}^{\, p} \, \big] \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i1i2}} \, \delta_{\mathsf{i1i3}} \, + \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \mathsf{G_{\mathsf{i1i2}}} \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i1i3}} \, + \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \, \mathsf{G_{\mathsf{i1i2}}} \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i1i3}} \, + \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \mathsf{G_{\mathsf{i1i3}}} \, \, \delta_{\mathsf{i1i2}} \, \, \delta_{\mathsf{i1i3}} \, \, \delta_{\mathsf{i1i3}} \, \, \delta_{\mathsf{i1i3}} \, + \, \frac{32}{135} \, \sum_{p} \, \, \, \mathsf{g_{1}}^{\, 4} \, \, \mathsf{g_{1
                                                                                                                                                \frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{{m_{_{0}}}^{4}} \; \overline{y_{e}}^{\text{i2i3}} \; y_{e}^{\text{i1i4}} \; \overline{y_{u}}^{\text{pr}} \; y_{u}^{\text{pr}} \; (s_{2 \, \gamma} + s_{\gamma} \; c_{\gamma}) \; \mathsf{LF}_{1, \theta} \left[ m_{\bar{u}}^{\text{r}} \right] - \frac{1}{8} \; s_{\gamma} \; \frac{1}{m_{_{0}}^{4}} \; \overline{y_{e}}^{\text{i2i3}} \; y_{e}^{\text{i1i4}} \; y_{e}^{\text{i1i4}} \; y_{e}^{\text{i2i3}} \; y_{e}^{\text{i1i4}} \; y_{e}^{\text{i2i3}} \; y_{e}^{\text{i1i4}} \; y_{e}^{\text{i2i3}} \; y_{e}^{\text{i2i3}} \; y_{e}^{\text{i1i4}} \; y_{e}^{\text{i2i3}} \; y_{e}^{\text{i2i
                                                                                                                                                                               \left(3\;{s_{4}}_{\text{Y}}\;{c_{\text{Y}}}\;\left({g_{1}}^{2}+{g_{2}}^{2}\right)\;+\;{s_{\text{Y}}}\;\left({g_{1}}^{2}\;\left(-\,1\;+\;3\;{c_{2}}_{\text{Y}}^{\;2}\right)\;+\;3\;{g_{2}}^{2}\;\left(-\,1\;+\;{c_{2}}_{\text{Y}}^{\;2}\right)\right)\right)\;LF_{1,0}\left[\,m_{_{\!\Phi}}\,\right]\;+\;3\,{g_{2}}^{2}\left(-\,1\;+\;{c_{2}}_{\text{Y}}^{\;2}\right)
                                                                                                                                                \frac{1}{8} \ \frac{1}{{m_{\text{D}}}^2} \ \left( 3 \ {s_{\text{Y}}}^4 \ \overline{y_e}^{\text{pr}} \ \overline{y_e}^{\text{i}2\text{i}3} \ y_e^{\text{pi4}} \ y_e^{\text{i}1\text{r}} + {s_{\text{Y}}}^2 \ y_e^{\text{i}1\text{i}4} \ \left( -2 \ \overline{y_e}^{\text{i}2\text{i}3} \ \left( {g_1}^2 + 3 \ {g_2}^2 \right) + 3 \ {s_{\text{Y}}}^2 \ \overline{y_e}^{\text{ri3}} \ \overline{y_e}^{\text{i}2\text{p}} \ y_e^{\text{rp}} \right) \right)
                                                                                                                                                                       4\;\overline{y_{e}}^{\text{i2p}}\;y_{e}^{\;\text{i1p}}\;\left(3\;c_{\gamma}^{\;2}\;\overline{y_{e}}^{\text{ri3}}\;y_{e}^{\;\text{ri4}}+2\;g_{1}^{\;2}\;\delta_{\text{i3i4}}\right)\right)\;\mathsf{LF}_{1,2}\left[\,\mathfrak{m}_{_{\!\bar{\Phi}}}\right]\;+
                                                                                                                                                \frac{1}{12} \, \, \mathsf{s_{\gamma}}^2 \, \left( - \, \mathsf{g_{1}}^2 \, \, \overline{\mathsf{y_{e}}}^{\mathsf{pi3}} \, \, \mathsf{y_{e}}^{\mathsf{pi4}} \, \, \delta_{\mathsf{i1i2}} + \overline{\mathsf{y_{e}}}^{\mathsf{i2p}} \, \, \mathsf{y_{e}}^{\mathsf{i1p}} \, \left( - \, \mathsf{3} \, \, \mathsf{s_{\gamma}}^2 \, \, \overline{\mathsf{y_{e}}}^{\mathsf{ri3}} \, \, \mathsf{y_{e}}^{\mathsf{ri4}} + \, \mathsf{g_{1}}^2 \, \, \delta_{\mathsf{i3i4}} \right) \right) \, \, \mathsf{LF_{2,1}[m_{\Phi}]} \, + \, \mathsf{g_{1}}^2 \, \, \mathsf{har}^2 \, \, \mathsf{har}
                                                                                                                                                \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi3} y_{e}^{pi4} \delta_{i1i2} + \left(-3 s_{\gamma}^{2} \overline{y_{e}}^{i2p} y_{e}^{i1p} + 4 g_{1}^{2} \delta_{i1i2}\right) \delta_{i3i4}\right) LF_{3,0}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi3} y_{e}^{pi4} \delta_{i1i2} + \left(-3 s_{\gamma}^{2} \overline{y_{e}}^{i2p} y_{e}^{i1p} + 4 g_{1}^{2} \delta_{i1i2}\right) \delta_{i3i4}\right) LF_{3,0}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi3} y_{e}^{pi4} \delta_{i1i2} + \left(-3 s_{\gamma}^{2} \overline{y_{e}}^{i2p} y_{e}^{i1p} + 4 g_{1}^{2} \delta_{i1i2}\right) \delta_{i3i4}\right) LF_{3,0}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi3} y_{e}^{pi4} \delta_{i1i2} + \left(-3 s_{\gamma}^{2} \overline{y_{e}}^{i2p} y_{e}^{i1p} + 4 g_{1}^{2} \delta_{i1i2}\right) \delta_{i3i4}\right) LF_{3,0}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi4} \delta_{i1i2} + \left(-3 s_{\gamma}^{2} \overline{y_{e}}^{i2p} y_{e}^{i1p} + 4 g_{1}^{2} \delta_{i1i2}\right) \delta_{i3i4}\right) LF_{3,0}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi4} \delta_{i1i2} + \left(-3 s_{\gamma}^{2} \overline{y_{e}}^{i2p} y_{e}^{i1p} + 4 g_{1}^{2} \delta_{i1i2}\right) \delta_{i1i}^{2}\right) G_{1}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi4} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2}\right) G_{1}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi4} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2}\right) G_{1}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \left(3 s_{\gamma}^{2} \overline{y_{e}}^{pi4} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2}\right) G_{1}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2}\right) G_{1}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2}\right) G_{1}[m_{\tiny \oplus}] - \frac{1}{36} g_{1}^{2} \delta_{i1i}^{2} + \frac{1}{36} g_{1}^{2} \delta_{i
                                                                                                                                                \frac{5}{24} \; \mathsf{g_1}^4 \; \mathsf{LF_{4,-1}} \left[ \; \mathsf{M_{\oplus}} \right] \; \delta_{\mathsf{i1i2}} \; \delta_{\mathsf{i3i4}} + \frac{4}{45} \; \mathsf{g_1}^4 \; \mathsf{LF_{5,-2}} \left[ \; \mathsf{M_{\oplus}} \right] \; \delta_{\mathsf{i1i2}} \; \delta_{\mathsf{i3i4}} \; + \frac{1}{45} \; \mathsf{I}_{\mathsf{I1i}} \; \delta_{\mathsf{I1i}} \; \delta_{\mathsf{
                                                                                                                                                \frac{1}{9} \ {\rm g_1}^4 \ {\rm LF_{3,0}} \, [\tilde{\mu}] \ \delta_{\rm ili2} \, \delta_{\rm i3i4} + \frac{1}{6} \ {\rm g_1}^4 \ {\rm LF_{4,-1}} \, [\tilde{\mu}] \ \delta_{\rm ili2} \, \delta_{\rm i3i4} -
                                                                                                                                            \frac{8}{45} \ g_1{}^4 \ \mathsf{LF}_{5,-2} \left[ \, \tilde{\mu} \, \right] \ \delta_{\mathsf{1112}} \ \delta_{\mathsf{1314}} + \frac{1}{2} \ g_1{}^2 \ \frac{1}{\mathsf{m_0}^2} \ \mathsf{s_\gamma}^2 \ \overline{\mathsf{y_e}}{}^{\mathsf{1213}} \ \mathsf{y_e}{}^{\mathsf{1114}} \ \mathsf{LF}_{\mathsf{1,1,0}} \left[ \, \mathsf{m_1} \, , \, \, \mathsf{m_{\tilde{e}}}{}^{\mathsf{13}} \, \right] \ - \frac{1}{2} \ \mathsf{m_{\tilde{e}}}{}^{\mathsf{13}} \ \mathsf{m_{\tilde{e}}}{}^{\mathsf{13}} + \frac{1}{2} \ \mathsf{m_{\tilde{e}}}{}^{\mathsf{13}} \, \mathsf{m_{\tilde{e
                                                                                                                                                \frac{1}{4} \; g_{1}^{2} \; \frac{1}{m_{\text{e}}^{2}} \; s_{\gamma}^{2} \; \overline{y_{e}^{\text{i2i3}}} \; y_{e}^{\text{i1i4}} \; \mathsf{LF}_{2,1,-1} \big[ \mathsf{m}_{1} \,, \; \mathsf{m}_{\tilde{e}}^{\text{i3}} \big] \; + \; \frac{1}{2} \; g_{1}^{2} \; \frac{1}{m_{\text{e}}^{2}} \; s_{\gamma}^{2} \; \overline{y_{e}^{\text{i2i3}}} \; y_{e}^{\text{i1i4}} \; \mathsf{LF}_{1,1,0} \big[ \mathsf{m}_{1} \,, \; \mathsf{m}_{\tilde{e}}^{\text{i4}} \big] \; - \; \frac{1}{2} \; g_{1}^{2} \; \frac{1}{m_{\text{e}}^{2}} \; s_{\gamma}^{2} \; \overline{y_{e}^{\text{i2i3}}} \; y_{e}^{\text{i1i4}} \; \mathsf{LF}_{1,1,0} \big[ \mathsf{m}_{1} \,, \; \mathsf{m}_{\tilde{e}}^{\text{i4}} \big] \; - \; \frac{1}{2} \; g_{1}^{2} \; \frac{1}{m_{\text{e}}^{2}} \; s_{\gamma}^{2} \; \overline{y_{e}^{\text{i2i3}}} \; y_{e}^{\text{i1i4}} \; \mathsf{LF}_{1,1,0} \big[ \mathsf{m}_{1} \,, \; \mathsf{m}_{\tilde{e}}^{\text{i4}} \big] \; - \; \frac{1}{2} \; \frac{1}{2}
                                                                                                                                                \frac{1}{4} g_1^2 \frac{1}{m_0^2} s_{\gamma}^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{2,1,-1}[m_1, m_{\tilde{e}}^{i4}] + \frac{1}{6} g_1^4 LF_{2,1,0}[m_1, m_{\tilde{e}}^{i4}] \delta_{i1i2} \delta_{i3i4} + \frac{1}{6} g_1^4 LF_{2,1,0}[m_1, m_{\tilde{e}}^{i4}] \delta_{i1i4} \delta_{i1i
                                                                                                                                                \frac{1}{6}\; {g_{1}}^{4}\; \mathsf{LF}_{2,2,-1}\!\left[\mathsf{m}_{1},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{4}} - \frac{1}{\mathsf{3}}\; {g_{1}}^{4}\; \mathsf{LF}_{\mathsf{3},1,-1}\!\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{4}} + \frac{1}{\mathsf{3}} \; {g_{1}}^{4}\; \mathsf{LF}_{\mathsf{3},1,-1}\!\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{4}} + \frac{1}{\mathsf{3}} \; {g_{1}}^{4} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{4}} + \frac{1}{\mathsf{3}} \; {g_{1}}^{4} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{4}} + \frac{1}{\mathsf{3}} \; {g_{1}}^{4} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{4}} + \frac{1}{\mathsf{3}} \; {g_{1}}^{4} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{4}} + \frac{1}{\mathsf{3}} \; {g_{1}}^{4} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{3}\mathsf{4}} + \frac{1}{\mathsf{3}} \; {g_{1}}^{4} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{1}\mathsf{2}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{1}\mathsf{3}\mathsf{4}} + \frac{1}{\mathsf{3}} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{3}\mathsf{3}\mathsf{4}} + \frac{1}{\mathsf{3}} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{e}}}^{\;i4}\right] \; \delta_{\mathsf{1}\mathsf{1}\mathsf{3}\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{3}\mathsf{4}} + \frac{1}{\mathsf{3}} \; \mathsf{LF}_{\mathsf{3},1,-1}\left[\mathsf{m}_{\mathsf{1}},\; \mathsf{m}_{\tilde{\mathsf{1}}\mathsf{3}}\right] \; \delta_{\mathsf{1}\mathsf{3}\mathsf{3}\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{3}\mathsf{3}} + \frac{1}{\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{3}} + \frac{1}{\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}} + \frac{1}{\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{3}} + \frac{1}{\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}\mathsf{3}} + \frac{1}{\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}} + \frac{1}{\mathsf{3}} \; \delta_{\mathsf{1}\mathsf{3}} + \frac{1}{\mathsf{3}} + \frac{1}{\mathsf{3}} + \frac{1}{\mathsf{3}} + \frac{1}{\mathsf{3}} 
                                                                                                                                                \frac{1}{6} \; g_1^{\; 4} \; \mathsf{LF_{4,1,-2}} \big[ \, \mathsf{m_1} , \; \mathsf{m_{\bar{e}}}^{\mathsf{i}\, 4} \, \big] \; \delta_{\mathsf{i}1\mathsf{i}2} \; \delta_{\mathsf{i}3\mathsf{i}4} \; + \; \frac{1}{8} \; g_1^{\; 2} \; \frac{1}{\mathsf{m_{\bar{e}}}^2} \; \mathsf{s_{\gamma}}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i}\, 2\mathsf{i}\, 3} \; \mathsf{y_e}^{\mathsf{i}\, 1\mathsf{i}\, 4} \; \mathsf{LF_{1,1,0}} \big[ \, \mathsf{m_1} , \; \mathsf{m_{\bar{l}}}^{\mathsf{i}\, 1} \, \big] \; - \; \frac{1}{6} \; \mathsf{g_1}^{\; 4} \; \mathsf{LF_{1,1,2}} \big[ \, \mathsf{m_2} , \; \mathsf{m_2}^{\mathsf{i}\, 1} \, \big] \; + \; \frac{1}{6} \; \mathsf{g_1}^{\; 2} \; \mathsf{g_2}^{\; 2} \; \mathsf{g_2}^{\; 2} \; \mathsf{g_3}^{\; 2} \; \mathsf{g_2}^{\; 2} \; \mathsf{g_3}^{\; 2} \; \mathsf{g_3}
                                                                                                                                                    \frac{1}{16} \ g_1^2 \ \frac{1}{m_{\text{g}}^2} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \mathsf{LF}_{2,1,-1} \big[ \, \mathsf{m}_1 \,, \, \, \mathsf{m}_{\tilde{l}}^{\text{i1}} \big] \ + \frac{1}{8} \ g_1^2 \ \frac{1}{m_{\text{g}}^2} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \mathsf{LF}_{1,1,0} \big[ \, \mathsf{m}_1 \,, \, \, \mathsf{m}_{\tilde{l}}^{\text{i2}} \big] \ - \frac{1}{8} \ g_1^2 \ \frac{1}{m_{\text{g}}^2} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \mathsf{LF}_{1,1,0} \big[ \, \mathsf{m}_1 \,, \, \, \mathsf{m}_{\tilde{l}}^{\text{i2}} \big] \ - \frac{1}{8} \ g_1^2 \ \frac{1}{m_{\text{g}}^2} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \mathsf{LF}_{1,1,0} \big[ \, \mathsf{m}_1 \,, \, \, \mathsf{m}_{\tilde{l}}^{\text{i2}} \big] \ - \frac{1}{8} \ g_1^2 \ \frac{1}{m_{\text{g}}^2} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \mathsf{LF}_{1,1,0} \big[ \, \mathsf{m}_1 \,, \, \, \mathsf{m}_{\tilde{l}}^{\text{i2}} \big] \ - \frac{1}{8} \ g_1^2 \ \frac{1}{m_{\text{g}}^2} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \mathsf{LF}_{1,1,0} \big[ \, \mathsf{m}_1 \,, \, \, \, \mathsf{m}_{\tilde{l}}^{\text{i2}} \big] \ - \frac{1}{8} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i2i3}} \ y_e^{\text{i1i4}} \ \mathsf{LF}_{1,1,0} \big[ \, \mathsf{m}_1 \,, \, \, \, \mathsf{m}_{\tilde{l}}^{\text{i2}} \big] \ - \frac{1}{8} \ s_{\text{y}}^2 \ \overline{y_e}^{\text{i2i3}} \ y_e^{\text{i2i3}} \ 
                                                                                                                                                \frac{1}{16} \ g_1^2 \ \frac{1}{m_0^2} \ s_\gamma^2 \ \overline{y_e}^{i2i3} \ y_e^{i1i4} \ \mathsf{LF}_{2,1,-1} \big[ \mathsf{m}_1, \ \mathsf{m}_{\tilde{l}}^{i2} \big] \ + \ \frac{1}{24} \ g_1^4 \ \mathsf{LF}_{2,1,0} \big[ \mathsf{m}_1, \ \mathsf{m}_{\tilde{l}}^{i2} \big] \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i1i2} \ \delta_{i1i2} \ \delta_{i1i3} \ \delta_{i1i4} \ + \ \delta_{i1i2} \ \delta_{i1i3} \ \delta_{i1i4} \ + \ \delta_{i1i2} \ \delta_{i1i3} \ \delta_{i1i4} \ + \ \delta_{i1i2} \ \delta_{i1i4} \ \delta_
                                                                                                                                                \frac{1}{24} \; g_{1}{}^{4} \; \mathsf{LF_{4,1,-2}} \big[ \, \mathsf{m_{1}} \, , \, \, \mathsf{m_{\tilde{1}}}^{\dot{1} \, 2} \, \big] \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \; + \; \frac{1}{2} \; g_{1}{}^{2} \; \frac{1}{\mathsf{m_{0}}^{\, 4}} \; \mathsf{S_{\gamma}}^{2} \; \overline{\mathsf{y_{e}}}^{\dot{1}\dot{2}\dot{1}\dot{3}} \; \mathsf{y_{e}}^{\dot{1}\dot{1}\dot{1}\dot{4}} \; \mathsf{LF_{1,1,-1}} \, [ \, \mathsf{m_{1}} \, , \, \, \tilde{\mu} \, ] \; + \; \frac{1}{2} \; \mathsf{m_{1}}^{\dot{1}\dot{1}\dot{1}\dot{1}} \; \mathsf{m_{2}}^{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{1}}^{\dot{1}\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}\dot{1}} \; \mathsf{M_{2}}^{\dot{1}} \; \mathsf{M_{2}}
                                                                                                                                         \mathbf{m_1} \, \mathbf{s_{\gamma}} \, \widetilde{\mu} \, \mathbf{c_{\gamma}} \, \mathbf{g_1}^2 \, \frac{1}{\mathbf{m_0}^4} \, \overline{\mathbf{y_e}}^{\mathbf{i}2\mathbf{i}3} \, \mathbf{y_e}^{\mathbf{i}1\mathbf{i}4} \, \left(\mathbf{c_{\gamma}}^2 - 2 \, \mathbf{s_{\gamma}}^2\right) \, \mathsf{LF_{1,1,0}[m_1,\,\widetilde{\mu}]} \, + \\
                                                                                                                                                \frac{3}{8}~g_2^2~\frac{1}{m_0^2}~s_\gamma^2~\overline{y_e}^{i2i3}~y_e^{i1i4}~LF_{1,1,0}\left[m_2\,,\,m_{\tilde{l}}^{~i1}\right] -
                                                                                                                                                \frac{3}{16}\ g_{2}^{2}\ \frac{1}{m_{\text{g}}^{2}}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ y_{e}^{\text{i1i4}}\ \mathsf{LF}_{2,\text{l},\text{-1}}\big[\,\mathsf{m}_{2}\,,\ \mathsf{m}_{\bar{l}}^{\text{i1}}\big] \ +\ \frac{3}{8}\ g_{2}^{2}\ \frac{1}{m_{\text{g}}^{2}}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ y_{e}^{\text{i1i4}}\ \mathsf{LF}_{1,\text{l},\text{0}}\big[\,\mathsf{m}_{2}\,,\ \mathsf{m}_{\bar{l}}^{\text{i2}}\big] \ -\ \frac{3}{8}\ g_{2}^{2}\ \frac{1}{m_{\text{g}}^{2}}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ y_{e}^{\text{i1i4}}\ \mathsf{LF}_{1,\text{l},\text{0}}\big[\,\mathsf{m}_{2}\,,\ \mathsf{m}_{\bar{l}}^{\text{i2}}\big] \ -\ \frac{3}{8}\ g_{2}^{2}\ \frac{1}{m_{\text{g}}^{2}}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ y_{e}^{\text{i1i4}}\ \mathsf{LF}_{1,\text{l},\text{0}}\big[\,\mathsf{m}_{2}\,,\ \mathsf{m}_{\bar{l}}^{\text{i2}}\big] \ -\ \frac{3}{8}\ g_{2}^{2}\ \frac{1}{m_{\text{g}}^{2}}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ y_{e}^{\text{i1i4}}\ \mathsf{LF}_{1,\text{l},\text{0}}\big[\,\mathsf{m}_{2}\,,\ \mathsf{m}_{\bar{l}}^{\text{i2}}\big] \ -\ \frac{3}{8}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ s_{\gamma}^{2}\ s_{\gamma}^{2}\ \overline{y_{e}}^{\text{i2i3}}\ s_{\gamma}^{2}\ s_{\gamma}^{2}
                                                                                                                                                \frac{3}{16} \ g_2^2 \ \frac{1}{m_0^2} \ g_\gamma^2 \ \overline{y_e}^{i2i3} \ y_e^{i1i4} \ \mathsf{LF}_{2,1,-1} \big[ \mathsf{m}_2 \,, \ \mathsf{m}_{\tilde{l}}^{\ i2} \big] \ + \ \frac{1}{8} \ g_1^2 \ g_2^2 \ \mathsf{LF}_{2,1,0} \big[ \mathsf{m}_2 \,, \ \mathsf{m}_{\tilde{l}}^{\ i2} \big] \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i1i2} \ \delta_{i3i4} \ + \ \delta_{i1i2} \ \delta_{i1i2} \ \delta_{i1i2} \ \delta_{i1i3} \ \delta_
                                                                                                                                                \frac{1}{8}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{2,2,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,-\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{2}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{1}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;\mathsf{LF}_{3,1,-1}\!\left[\mathsf{m}_{2}\,,\,\mathsf{m}_{\tilde{l}}^{\,\,i2}\right]\;\delta_{\dot{1}\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{1}\dot{4}}\,+\,\frac{1}{4}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;g_{1}^{2}\;
                                                                                                                                                \frac{1}{8} \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{LF_{4,1,-2}} \big[ \, \mathsf{m_2} \, , \; \mathsf{m_{\tilde{l}}^{-i\,2}} \, \big] \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} + \frac{3}{2} \; \mathsf{g_2}^2 \; \frac{1}{\mathsf{m_s}^4} \; \mathsf{s_\gamma}^2 \; \overline{\mathsf{y_e}^{\dot{1}\dot{2}\dot{1}\dot{3}}} \; \mathsf{y_e^{\dot{1}\dot{1}\dot{1}\dot{4}}} \; \mathsf{LF_{1,1,-1}} \left[ \, \mathsf{m_2} \, , \; \widetilde{\mu} \, \right] \; + \frac{1}{8} \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{LF_{4,1,-2}} \big[ \, \mathsf{m_2} \, , \; \mathsf{m_{\tilde{l}}^{\dot{1}\dot{2}}} \, \big] \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} + \frac{3}{2} \; \mathsf{g_2}^2 \; \frac{1}{\mathsf{m_s}^4} \; \mathsf{s_\gamma}^2 \; \overline{\mathsf{y_e}^{\dot{1}\dot{2}\dot{1}\dot{3}}} \; \mathsf{y_e^{\dot{1}\dot{1}\dot{1}\dot{4}}} \; \mathsf{LF_{1,1,-1}} \left[ \, \mathsf{m_2} \, , \; \widetilde{\mu} \, \right] \; + \frac{1}{8} \; \mathsf{g_1}^2 \; \mathsf{g_2}^2 \; \mathsf{LF_{4,1,-2}} \left[ \, \mathsf{m_2} \, , \; \mathsf{m_{\tilde{l}}^{\dot{1}\dot{2}}} \, \right] \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} + \frac{3}{2} \; \mathsf{g_2}^2 \; \frac{1}{\mathsf{m_s}^4} \; \mathsf{s_\gamma}^2 \; \overline{\mathsf{y_e}^{\dot{1}\dot{2}\dot{1}\dot{3}}} \; \mathsf{y_e^{\dot{1}\dot{1}\dot{1}\dot{4}}} \; \mathsf{LF_{1,1,-1}} \left[ \, \mathsf{m_2} \, , \; \widetilde{\mu} \, \right] \; + \frac{1}{8} \; \mathsf{m_2}^2 \; \mathsf{v_2}^2 \; \mathsf{v_2}^2 \; \mathsf{v_3}^2 \; \mathsf{v_3}
                                                                                                                                         3 m<sub>2</sub> s<sub>\gamma</sub> \widetilde{\mu} c<sub>\gamma</sub> g<sub>2</sub><sup>2</sup> \frac{1}{m_e^4} \overline{y_e}^{i2i3} y<sub>e</sub><sup>i1i4</sup> \left(c_{\gamma}^2 - 2 s_{\gamma}^2\right) LF<sub>1,1,0</sub> [m<sub>2</sub>, \widetilde{\mu}] +
                                                                                                                                                \frac{3}{2} \; s_{\gamma} \; \frac{1}{m_{\text{\tiny S}}^4} \; \overline{y_e}^{\text{i2i3}} \; y_e^{\text{i1i4}} \; \left( \widetilde{\mu} \; c_{\gamma} \; \overline{y_d}^{\text{pr}} \; \left( a_d^{\text{pr}} \; \left( c_{\gamma}^{\; 2} - 2 \; s_{\gamma}^{\; 2} \right) \right. \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; y_d^{\text{pr}} \right) \; + \; \left( c_{\gamma}^{\; 2} + 2 \; s_{\gamma}^{\; 2} \right) \; \\ \left. - 3 \; s_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; \widetilde{\mu} \; c_{\gamma} \; \widetilde{\mu} \; \widetilde
                                                                                                                                                                                                                                    \overline{a_d}^{pr} \, \left( a_d^{pr} \, \left( 2 \, s_\gamma \, c_\gamma^{\, 2} - s_\gamma^{\, 3} \right) \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, pr} \, \left( c_\gamma^{\, 2} - 2 \, s_\gamma^{\, 2} \right) \right) \right) \, LF_{1,1,0} \left[ \, m_{\tilde{d}}^{\, \, r} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, \, pr} \, \left( c_\gamma^{\, \, 2} - 2 \, s_\gamma^{\, \, 2} \right) \right) \, LF_{1,1,0} \left[ \, m_{\tilde{d}}^{\, \, \, r} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, \, pr} \, \left( c_\gamma^{\, \, 2} - 2 \, s_\gamma^{\, \, 2} \right) \, \right) \, LF_{1,1,0} \left[ \, m_{\tilde{d}}^{\, \, \, r} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, \, pr} \, \left( c_\gamma^{\, \, 2} - 2 \, s_\gamma^{\, \, 2} \right) \, \right] \, LF_{1,1,0} \left[ \, m_{\tilde{d}}^{\, \, r} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, \, pr} \, \left( c_\gamma^{\, \, 2} - 2 \, s_\gamma^{\, \, 2} \right) \, \right] \, LF_{1,1,0} \left[ \, m_{\tilde{d}}^{\, \, r} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, \, pr} \, \left( c_\gamma^{\, \, 2} - 2 \, s_\gamma^{\, \, 2} \right) \, \right] \, LF_{1,1,0} \left[ \, m_{\tilde{d}}^{\, \, r} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, \, pr} \, \left( c_\gamma^{\, \, 2} - 2 \, s_\gamma^{\, \, 2} \right) \, \right] \, LF_{1,1,0} \left[ \, m_{\tilde{d}}^{\, \, r} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma \, y_d^{\, \, pr} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, p} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, p} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma^{\, \, p} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, p} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, p} \, \right] \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, p} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, p} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, p} \, \left( c_\gamma^{\, \, \, p} \, , \, m_{\tilde{q}}^{\, \, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, p} \, \left( c_\gamma^{\, \, \, \, p} \, , \, m_{\tilde{q}}^{\, \, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, p} \, \left( c_\gamma^{\, \, \, \, p} \, , \, m_{\tilde{q}}^{\, \, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, \, p} \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, \, p} \, \left( c_\gamma^{\, \, \, \, p} \, , \, m_{\tilde{q}}^{\, \, \, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, \, p} \, \left( c_\gamma^{\, \, \, \, \, p} \, \right) \, + \, \widetilde{\mu} \, c_\gamma^{\, \, \, \, \, p} \, \left( c_\gamma^{\, \, \, \, \, \, p} \, , \, m_{\tilde{q}}^{\, \, \, \, \, p} \, \right) \, + 
                                                                                                                                                \frac{1}{4} \; \frac{1}{m_{\text{o}}^{2}} \; \text{S}_{\text{Y}}^{2} \; \overline{\text{y}_{\text{e}}}^{\text{ri3}} \; \overline{\text{y}_{\text{e}}}^{\text{i2p}} \; \text{y}_{\text{e}}^{\text{rp}} \; \text{y}_{\text{e}}^{\text{i1i4}} \; \text{LF}_{1,1,0} \left[ \, m_{\tilde{\text{e}}}^{\, \text{p}} \, , \; \widetilde{\mu} \, \right] \; - \; \frac{1}{3} \; g_{1}^{2} \; \overline{\text{y}_{\text{e}}}^{\text{i2p}} \; \text{y}_{\text{e}}^{\text{i1p}} \; \text{LF}_{2,1,0} \left[ \, m_{\tilde{\text{e}}}^{\, \text{p}} \, , \; \widetilde{\mu} \, \right] \; \delta_{\text{i3i4}} \; + \; \delta_{\text{e}}^{\, \text{i3p}} \; + \; \delta_{\text{e}}^{\, \text{i3p}} \; \delta_{\text{e}}^{\, 
                                                                                                                                                \frac{1}{6} \; \mathsf{g_1}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i2p}} \; \mathsf{y_e}^{\mathsf{i1p}} \; \mathsf{LF_{2,2,-1}} \big[ \mathsf{m_e^-p}, \; \widetilde{\mu} \big] \; \delta_{\mathsf{i3i4}} + \frac{1}{6} \; \mathsf{g_1}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i2p}} \; \mathsf{y_e^{\mathsf{i1p}}} \; \mathsf{LF_{3,1,-1}} \big[ \mathsf{m_e^-p}, \; \widetilde{\mu} \big] \; \delta_{\mathsf{i3i4}} + \frac{1}{6} \; \mathsf{g_1}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i2p}} \; \mathsf{y_e^{\mathsf{i1p}}} \; \mathsf{LF_{3,1,-1}} \big[ \mathsf{m_e^-p}, \; \widetilde{\mu} \big] \; \delta_{\mathsf{i3i4}} + \frac{1}{6} \; \mathsf{g_1}^2 \; \overline{\mathsf{y_e^-i2p}} \; \mathsf{y_e^-i2p} \; \mathsf{y_e^-i2p} \; \mathsf{J_e^-i2p} \; \mathsf{J_e^-i2
                                                                                                                                                                           s_{\gamma} \, \frac{1}{m_{\text{o}}^4} \, \overline{y_e}^{\text{i2i3}} \, y_e^{\text{i1i4}} \, \left( \widetilde{\mu} \, c_{\gamma} \, \overline{y_e}^{\text{pr}} \, \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{\, 2} \right) \right. \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, s_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, c_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, c_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, c_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, c_{\gamma} \, \widetilde{\mu} \, c_{\gamma} \, y_e^{\text{pr}} \right) + \left( a_e^{\text{pr}} \, c_{\gamma} \, y_e^{\text{pr}} \right) \\ \left. - 3 \, c_{\gamma} \, \widetilde{\mu} \, c_{\gamma} 
                                                                                                                                                                                                                                    \frac{1}{4} \; \frac{1}{\mathsf{m_e}^2} \; \mathsf{S_{\gamma}}^2 \; \overline{\mathsf{y_e}}^{\mathsf{pr}} \; \overline{\mathsf{y_e}}^{\mathsf{i2i3}} \; \mathsf{y_e}^{\mathsf{pi4}} \; \mathsf{y_e}^{\mathsf{i1r}} \; \mathsf{LF_{1,1,0}} \big[ \mathsf{m_e}^\mathsf{r}, \; \widetilde{\mu} \big] \; - \; \frac{1}{3} \; \mathsf{g_1}^4 \; \mathsf{LF_{2,1,0}} \big[ \mathsf{m_e}^\mathsf{i4}, \; \mathsf{m_1} \big] \; \delta_{\mathsf{i1i2}} \; \delta_{\mathsf{i3i4}} \; + \; \frac{1}{3} \; \mathsf{m_1}^4 \; + \; \frac{1}{3} \; \mathsf{m_2}^4 \; + \; \frac{1}{3} \; + \; \frac{1}{3} \; \mathsf{m_2}^4 \; + \; \frac{1}{3} \; + \; \frac{1}{3} \; \mathsf{m_2}^4 \; + \; \frac{1}{3} \; + \; \frac{1}{3} \; + \; \frac{1}{3} \; \mathsf{m_2}^4 \; + \; \frac{1}{3} \; + \; \frac{1}
                                                                                                                                                \frac{1}{6}\; {\rm g_1}^4\; {\rm LF_{3,1,-1}} \big[\, {\rm m_{\tilde{e}}}^{\rm i\, 4} \,,\, {\rm m_1} \big] \; \delta_{\rm i\, 1i\, 12} \; \delta_{\rm i\, 3i\, 4} \,+\, \frac{1}{2}\; {\rm s_{\gamma}}\; {\rm c_{\gamma}} \; \frac{1}{{\rm m_{e}}^2} \; \overline{{\rm y_e}}^{\rm i\, 2i\, 3} \; {\rm y_e}^{\rm i\, 1i\, 4}
                                                                                                                                                                                   \left(\widetilde{\mu}\,\overline{y_e}^{pr}\,\left(a_e^{\,pr}\,\left(-\,c_{_{Y}}^{\,\,2}+\,s_{_{Y}}^{\,\,2}\right)\,+\,2\,\,s_{_{Y}}\,\widetilde{\mu}\,\,c_{_{Y}}\,y_e^{\,pr}\right)\,+\,\overline{a_e}^{pr}\,\left(-\,2\,\,s_{_{Y}}\,c_{_{Y}}\,a_e^{\,pr}\,+\,\widetilde{\mu}\,\,y_e^{\,pr}\,\left(-\,c_{_{Y}}^{\,\,2}+\,s_{_{Y}}^{\,\,2}\right)\right)\right)
                                                                                                                                                                       LF_{2,1,0}\left[\,m_{\tilde{l}}^{\;\;p}\,,\;m_{\tilde{e}}^{\;\;r}\,\right]\,+\,\frac{1}{2}\,\,s_{\gamma}\,\,c_{\gamma}\,\,\frac{1}{m_{\text{s}}^{2}}\,\,\overline{y_{e}}^{\text{i2i3}}\,\,y_{e}^{\;\,\text{i1i4}}\,\,\left(\widetilde{\mu}\,\,\overline{y_{e}}^{\text{pr}}\,\,\left(\,a_{e}^{\;pr}\,\,\left(\,c_{\gamma}^{\;\,2}\,-\,s_{\gamma}^{\;\,2}\,\right)\,\,-\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{e}^{\;pr}\,\right)\,+\,\frac{1}{2}\,\,s_{\gamma}\,\,c_{\gamma}\,\,y_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,\left(\,a_{e}^{\;\,pr}\,\,a_{e}^{
                                                                                                                                                                                                                                    \overline{a_{e}}^{\text{pr}}\left(2\;s_{\gamma}\;c_{\gamma}\;a_{e}^{\;\text{pr}}+\widetilde{\mu}\;y_{e}^{\;\text{pr}}\left(c_{\gamma}^{\;2}-s_{\gamma}^{\;2}\right)\right)\right)\;\mathsf{LF}_{3,1,-1}\!\left[\,\mathsf{m}_{\tilde{l}}^{\;\;p}\,,\;\mathsf{m}_{\tilde{e}}^{\;\;r}\,\right]\;-\,\mathsf{m}_{\tilde{e}}^{\;\;p}\left(2\;s_{\gamma}^{\;\;2}+\widetilde{\mu}\;y_{e}^{\;\;p}\right)\left(c_{\gamma}^{\;\;2}-c_{\gamma}^{\;\;2}\right)\left(c_{\gamma}^{\;\;2}-c_{\gamma}^{\;\;2}\right)\right)
                                                                                                                                                \frac{1}{2} \; c_{\gamma}^{\; 2} \; \overline{y_{e}}^{i2i3} \; y_{e}^{i1i4} \; \left( c_{\gamma} \; \overline{a_{e}}^{pr} - s_{\gamma} \, \widetilde{\mu} \; \overline{y_{e}}^{pr} \right) \; \left( c_{\gamma} \; a_{e}^{\; pr} - s_{\gamma} \, \widetilde{\mu} \; y_{e}^{\; pr} \right) \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; r} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{1}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, , \; \mathsf{m}_{\tilde{e}}^{\; p} \, \right] \; + \; \mathsf{LF}_{3,1,0} \left[ \, \mathsf{m}_{\tilde{e}}^{\; p} \, , \; 
                                                                                                                                            \frac{3}{2}\;c_{\gamma}^{\;2}\;\overline{y_{e}^{\;i2i3}}\;y_{e}^{\;i1i4}\;\left(c_{\gamma}\;\overline{a_{e}}^{pr}-s_{\gamma}\,\widetilde{\mu}\;\overline{y_{e}}^{pr}\right)\;\left(c_{\gamma}\;a_{e}^{\;pr}-s_{\gamma}\,\widetilde{\mu}\;y_{e}^{\;pr}\right)\;LF_{4,1,-1}\left[m_{\widetilde{l}}^{\;p},\;m_{\widetilde{e}}^{\;r}\right]-\frac{1}{2}\left[m_{\widetilde{l}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}+m_{\widetilde{e}}^{\;p}
                                                                                                                                         c_{\gamma}^{2}\,\overline{y_{e}}^{\text{i2i3}}\,y_{e}^{\text{i1i4}}\,\left(c_{\gamma}\,\overline{a_{e}}^{\text{pr}}-s_{\gamma}\,\widetilde{\mu}\,\overline{y_{e}}^{\text{pr}}\right)\,\left(c_{\gamma}\,a_{e}^{\text{pr}}-s_{\gamma}\,\widetilde{\mu}\,y_{e}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\!\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{r}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{pr}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right)\,\mathsf{LF}_{5,1,-2}\left[\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e}}^{\text{p}}\right]\,+\,2\,\left(\mathsf{m}_{\tilde{l}}^{\text{p}},\,\mathsf{m}_{\tilde{e
                                                                                                                                                \frac{1}{2}\;\frac{1}{m_{_0}{^2}}\;\mathbf{S_{\gamma}}^2\;\overline{\mathbf{y_e}}^{\text{pr}}\;\overline{\mathbf{y_e}}^{\text{i2i3}}\;\mathbf{y_e}^{\text{pi4}}\;\mathbf{y_e}^{\text{i1r}}\;\mathsf{LF_{1,1,0}}\left[\mathbf{m_{\tilde{l}}}^{\text{p}},\;\widetilde{\mu}\right] - \frac{1}{6}\;\mathbf{g_1}^2\;\overline{\mathbf{y_e}}^{\text{pi3}}\;\mathbf{y_e}^{\text{pi4}}\;\mathsf{LF_{2,1,0}}\left[\mathbf{m_{\tilde{l}}}^{\text{p}},\;\widetilde{\mu}\right]\;\delta_{\text{i1i2}} + \frac{1}{6}\left[\mathbf{m_{\tilde{l}}}^{\text{p}},\;\widetilde{\mu}\right]
                                                                                                                                                               \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{2,2,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi3}} \; {y_{e}}^{\text{pi4}} \; \mathsf{LF}_{3,1,-1} \big[ \mathsf{m}_{\bar{l}}^{\; \mathsf{p}} , \; \widetilde{\mu} \big] \; \delta_{\text{ili2}} + \frac{1}{12} \; {g_{1}}^{2} \; \overline{y_{e}}^{\text{pi4}} \; {y_{e}}^{\text{pi4}} \; {y_
                                                                                                                                                \frac{1}{2} \; \frac{1}{m_{\text{g}}^{2}} \; \mathsf{S}_{\text{Y}}^{2} \; \overline{\mathsf{y}_{\text{e}}}^{\text{ri3}} \; \overline{\mathsf{y}_{\text{e}}}^{\text{i2p}} \; \mathsf{y}_{\text{e}}^{\, \text{rp}} \; \mathsf{y}_{\text{e}}^{\, \text{i1i4}} \; \mathsf{LF}_{1,1,0} \left[ \, \mathsf{m}_{\tilde{l}}^{\, \text{r}} \, , \; \tilde{\mu} \, \right] \; - \; \frac{1}{12} \; \mathsf{g}_{1}^{\; 4} \; \mathsf{LF}_{2,1,0} \left[ \, \mathsf{m}_{\tilde{l}}^{\, \, \text{i2}} \, , \; \mathsf{m}_{1} \, \right] \; \delta_{\text{i1i2}} \; \delta_{\text{i3i4}} \; + \; \frac{1}{12} \; \mathsf{g}_{1}^{\, 4} \; \mathsf{LF}_{2,1,0} \left[ \, \mathsf{m}_{\tilde{l}}^{\, \, \text{i2}} \, , \; \mathsf{m}_{1} \, \right] \; \delta_{\text{i1i2}} \; \delta_{\text{i3i4}} \; + \; \frac{1}{12} \; \mathsf{m}_{1}^{\, 2} \; \mathsf{m}_{1} \; \mathsf{m}_{1} \; \mathsf{m}_{1} \; \mathsf{m}_{2} \; \mathsf{
                                                                                                                                                \frac{1}{24} \; g_{1}{}^{4} \; \mathsf{LF}_{3,1,-1} \big[ \, \mathsf{m}_{\bar{\mathsf{l}}}{}^{\,\dot{\mathsf{l}}2} \,, \; \mathsf{m}_{1} \, \big] \; \delta_{\dot{\mathsf{l}}\dot{\mathsf{l}}\dot{\mathsf{l}}2} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} - \frac{1}{4} \; g_{1}{}^{2} \; g_{2}{}^{2} \; \mathsf{LF}_{2,1,0} \big[ \, \mathsf{m}_{\bar{\mathsf{l}}}{}^{\,\dot{\mathsf{l}}2} \,, \; \mathsf{m}_{2} \, \big] \; \delta_{\dot{\mathsf{l}}\dot{\mathsf{l}}\dot{\mathsf{l}}2} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} + \frac{1}{4} \; g_{1}{}^{2} \; g_{2}{}^{2} \; \mathsf{LF}_{2,1,0} \big[ \, \mathsf{m}_{\bar{\mathsf{l}}}{}^{\,\dot{\mathsf{l}}2} \,, \; \mathsf{m}_{2} \, \big] \; \delta_{\dot{\mathsf{l}}\dot{\mathsf{l}}\dot{\mathsf{l}}2} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} + \frac{1}{4} \; g_{1}{}^{2} \; g_{2}{}^{2} \; \mathsf{LF}_{2,1,0} \big[ \, \mathsf{m}_{\bar{\mathsf{l}}}{}^{\,\dot{\mathsf{l}}2} \,, \; \mathsf{m}_{2} \, \big] \; \delta_{\dot{\mathsf{l}}\dot{\mathsf{l}}\dot{\mathsf{l}}2} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} + \frac{1}{4} \; g_{1}{}^{2} \; g_{2}{}^{2} \; \mathsf{LF}_{2,1,0} \big[ \, \mathsf{m}_{\bar{\mathsf{l}}}{}^{\,\dot{\mathsf{l}}2} \,, \; \mathsf{m}_{2} \, \big] \; \delta_{\dot{\mathsf{l}}\dot{\mathsf{l}}2} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} + \frac{1}{4} \; g_{1}{}^{2} \; g_{2}{}^{2} \; \mathsf{LF}_{2,1,0} \big[ \, \mathsf{m}_{\bar{\mathsf{l}}}{}^{\,\dot{\mathsf{l}}2} \,, \; \mathsf{m}_{2} \, \big] \; \delta_{\dot{\mathsf{l}}\dot{\mathsf{l}}2} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} + \frac{1}{4} \; g_{1}{}^{2} \; g_{2}{}^{2} \; \mathsf{LF}_{2,1,0} \, \big[ \, \mathsf{m}_{\bar{\mathsf{l}}}{}^{\,\dot{\mathsf{l}}2} \,, \; \mathsf{m}_{2} \, \big] \; \delta_{\dot{\mathsf{l}}\dot{\mathsf{l}}3\dot{\mathsf{l}}4} \; \delta_{\dot{\mathsf{l}}3\dot{\mathsf{l}}4} \; \delta_{\dot{\mathsf{l}}3
                                                                                                                                                    \frac{1}{8} \; {g_{1}}^{2} \; {g_{2}}^{2} \; \mathsf{LF_{3,1,-1}} \big[ \, \mathsf{m_{\tilde{l}}}^{\, \text{i}2} \, , \; \mathsf{m_{2}} \big] \; \delta_{\text{ili}2} \; \delta_{\text{i3i4}} + \frac{3}{2} \; \mathsf{s_{\gamma}} \; \mathsf{c_{\gamma}} \; \frac{1}{\mathsf{m_{e}}^{2}} \; \overline{\mathsf{ye}}^{\text{i2i3}} \; \mathsf{ye}^{\text{ili4}}
                                                                                                                                                                               \left(\widetilde{\mu}\,\overline{y_d}^{pr}\,\left(a_d^{\,pr}\,\left(-\,c_{_{Y}}^{\,\,2}+\,s_{_{Y}}^{\,\,2}\right)\,+\,2\,\,s_{_{Y}}\,\widetilde{\mu}\,\,c_{_{Y}}\,y_d^{\,pr}\right)\,+\,\overline{a_d}^{pr}\,\left(-\,2\,\,s_{_{Y}}\,c_{_{Y}}\,a_d^{\,pr}\,+\,\widetilde{\mu}\,\,y_d^{\,pr}\,\left(-\,c_{_{Y}}^{\,\,2}+\,s_{_{Y}}^{\,\,2}\right)\right)\right)
                                                                                                                                                                       LF_{2,1,0}\left[\,m_{\tilde{q}}^{\phantom{\tilde{q}}p}\,,\,m_{\tilde{d}}^{\phantom{\tilde{d}}r}\,\right]\,+\,\frac{3}{2}\,\,s_{\gamma}\,\,c_{\gamma}\,\,\frac{1}{m_{o}^{2}}\,\,\overline{y_{e}}^{i2i3}\,\,y_{e}^{\,i1i4}\,\,\left(\widetilde{\mu}\,\,\overline{y_{d}}^{pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,c_{\gamma}^{\,\,2}\,-\,s_{\gamma}^{\,\,2}\,\right)\,\,-\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{d}^{\,pr}\,\right)\,+\,3\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,c_{\gamma}^{\,\,2}\,-\,s_{\gamma}^{\,\,2}\,\right)\,\,-\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{d}^{\,pr}\,\right)\,+\,3\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,c_{\gamma}^{\,\,2}\,-\,s_{\gamma}^{\,\,2}\,\right)\,\,-\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{d}^{\,pr}\,\right)\,+\,3\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,c_{\gamma}^{\,\,2}\,-\,s_{\gamma}^{\,\,2}\,\right)\,\,-\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{d}^{\,pr}\,\right)\,+\,3\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,c_{\gamma}^{\,\,2}\,-\,s_{\gamma}^{\,\,2}\,\right)\,\,-\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{d}^{\,pr}\,\right)\,+\,3\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,c_{\gamma}^{\,\,2}\,-\,s_{\gamma}^{\,\,2}\,\right)\,\,-\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{d}^{\,pr}\,\right)\,\right)\,+\,3\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,\left(\,a_{d}^{\,pr}\,\,a_{d}^{\,pr}\,\,a_{d}^{\,pr}\,\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,pr}\,a_{d}^{\,
                                                                                                                                                                                                                                    c_{\gamma}^{2} \, \overline{y_{e}}^{\text{i2i3}} \, y_{e}^{\text{i1i4}} \, \left( c_{\gamma} \, \overline{a_{d}}^{\text{pr}} - s_{\gamma} \, \widetilde{\mu} \, \overline{y_{d}}^{\text{pr}} \right) \, \left( c_{\gamma} \, a_{d}^{\text{pr}} - s_{\gamma} \, \widetilde{\mu} \, y_{d}^{\text{pr}} \right) \, LF_{4,1,-1} \left[ m_{\tilde{q}}^{\text{p}}, \, m_{\tilde{d}}^{\text{r}} \right] - m_{\tilde{q}}^{\text{pr}} \, \left( c_{\gamma} \, a_{d}^{\text{pr}} - s_{\gamma} \, \widetilde{\mu} \, y_{d}^{\text{pr}} \right) \, LF_{4,1,-1} \left[ m_{\tilde{q}}^{\text{p}}, \, m_{\tilde{d}}^{\text{r}} \right] - m_{\tilde{q}}^{\text{pr}} \, \left( c_{\gamma} \, a_{d}^{\text{pr}} - s_{\gamma} \, \widetilde{\mu} \, y_{d}^{\text{pr}} \right) \, LF_{4,1,-1} \left[ m_{\tilde{q}}^{\text{p}}, \, m_{\tilde{d}}^{\text{r}} \right] - m_{\tilde{q}}^{\text{pr}} \, \left( c_{\gamma} \, a_{d}^{\text{pr}} - s_{\gamma} \, \widetilde{\mu} \, y_{d}^{\text{pr}} \right) \, LF_{4,1,-1} \left[ m_{\tilde{q}}^{\text{p}}, \, m_{\tilde{d}}^{\text{pr}} \right] - m_{\tilde{q}}^{\text{pr}} \, \left( c_{\gamma} \, a_{d}^{\text{pr}} - s_{\gamma} \, \widetilde{\mu} \, y_{d}^{\text{pr}} \right) \, LF_{4,1,-1} \left[ m_{\tilde{q}}^{\text{p}}, \, m_{\tilde{q}}^{\text{pr}} \right] \, .
                                                                                                                                         3\;c_{\gamma}^{\;2}\;\overline{y_{e}^{\;i2\,i3}}\;y_{e}^{\;i1\,i4}\;\left(c_{\gamma}\;\overline{a_{d}}^{pr}-s_{\gamma}\;\widetilde{\mu}\;\overline{y_{d}}^{pr}\right)\;\left(c_{\gamma}\;a_{d}^{\;pr}-s_{\gamma}\;\widetilde{\mu}\;y_{d}^{\;pr}\right)\;LF_{5,1,-2}\left[m_{\tilde{q}}^{\;p},\;m_{\tilde{d}}^{\;r}\right]\;+
                                                                                                                                                \frac{3}{2} \text{ S}_{\gamma} \frac{1}{m_{\text{e}}^4} \overline{\text{y}_{\text{e}}}^{\text{i2i3}} \text{ y}_{\text{e}}^{\text{i1i4}} \left( c_{\gamma} \, \overline{a_{\text{u}}}^{\text{pr}} \, \left( -3 \, s_{\gamma} \, c_{\gamma} \, a_{\text{u}}^{\text{pr}} + \widetilde{\mu} \, y_{\text{u}}^{\text{pr}} \, \left( c_{\gamma}^{2} - 2 \, s_{\gamma}^{2} \right) \right) + \widetilde{\mu} \, \overline{y_{\text{u}}}^{\text{pr}} \right)
                                                                                                                                                                                                                                                                              \left(a_{u}^{pr} \left(c_{\gamma}^{3}-2 \; c_{\gamma} \; s_{\gamma}^{\; 2}\right)-s_{\gamma} \; \widetilde{\mu} \; y_{u}^{\; pr} \; \left(-2 \; c_{\gamma}^{\; 2}+s_{\gamma}^{\; 2}\right)\right)\right) \; LF_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \overline{y_{e}}^{i2i3} \; F_{1,1,0}\left[m_{\tilde{q}}^{\; p}, \; m_{\tilde{u}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; F_{1,1,0}\left[m_{\tilde{q}}, \; m_{\tilde{q}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; F_{1,1,0}\left[m_{\tilde{q}}, \; m_{\tilde{q}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; F_{1,1,0}\left[m_{\tilde{q}}, \; m_{\tilde{q}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; F_{1,1,0}\left[m_{\tilde{q}}, \; m_{\tilde{q}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; F_{1,1,0}\left[m_{\tilde{q}}, \; m_{\tilde{q}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; F_{1,1,0}\left[m_{\tilde{q}}, \; m_{\tilde{q}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; F_{1,1,0}\left[m_{\tilde{q}}, \; m_{\tilde{q}}^{\; r}\right] \\ +\frac{3}{2} \; s_{\gamma} \; c_{\gamma} \; \frac{1}{m_{o}^{2}} \; \frac{1}{m_{o
                                                                                                                                                                       y_{e}^{\text{ili4}} \, \left( \widetilde{\mu} \, \overline{y_{u}}^{\text{pr}} \, \left( a_{u}^{\, \, \text{pr}} \, \left( - \, c_{\gamma}^{\, \, 2} + \, s_{\gamma}^{\, \, 2} \right) \, - \, 2 \, \, s_{\gamma} \, \widetilde{\mu} \, \, c_{\gamma} \, y_{u}^{\, \, \text{pr}} \right) \, + \, \overline{a_{u}}^{\, \, \text{pr}} \, \left( 2 \, \, s_{\gamma} \, \, c_{\gamma} \, \, a_{u}^{\, \, \text{pr}} \, + \, \widetilde{\mu} \, \, y_{u}^{\, \, \text{pr}} \, \left( - \, c_{\gamma}^{\, \, 2} + \, s_{\gamma}^{\, \, 2} \right) \right) \right) \, d_{\mu} \, d
                                                                                                                                                                       LF_{2,1,0}\left[\,m_{\tilde{u}}^{\,\,r}\,,\,m_{\tilde{q}}^{\,\,p}\,\right]\,+\,\frac{3}{2}\,\,s_{\gamma}\,\,c_{\gamma}\,\,\frac{1}{m_{o}^{\,2}}\,\,\overline{y_{e}}^{i\,2i\,3}\,\,y_{e}^{\,\,i\,1i\,4}\,\,\left(\widetilde{\mu}\,\,\overline{y_{u}}^{pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,c_{\gamma}^{\,\,2}\,-\,s_{\gamma}^{\,\,2}\,\right)\,+\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{u}^{\,\,pr}\,\right)\,+\,2\,\,s_{\gamma}\,\,\widetilde{\mu}\,\,c_{\gamma}\,\,y_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,a_{u}^{\,\,pr}\,\,\left(\,a_{u}^{\,\,pr}\,\,a_{u}^{\,\,pr}\,\,a_{u}^{\,\,pr}\,\,a_{u}^{\,\,pr}\,\,a_{u}^{\,\,pr}\,\,a_{u}^{\,\,pr}\,\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{u}^{\,pr}\,a_{
                                                                                                                                                                                                                                    \overline{a_u}^{\text{pr}} \left(-2 \text{ s}_{\text{Y}} \text{ c}_{\text{Y}} \text{ a}_u^{\text{pr}} + \widetilde{\mu} \text{ y}_u^{\text{pr}} \left(\text{c}_{\text{Y}}^{2} - \text{s}_{\text{Y}}^{2}\right)\right)\right) \text{ LF}_{3,1,-1} \left[\text{m}_{\tilde{u}}^{\text{r}}, \text{m}_{\tilde{q}}^{\text{p}}\right] -
                                                                                                                                            \frac{3}{2} \; c_{\gamma}^{\; 2} \; \overline{y_{e}^{\mathsf{i2i3}}} \; y_{e}^{\; \mathsf{i1i4}} \; \left( - \, s_{\gamma} \; \overline{a_{u}}^{\mathsf{pr}} + \widetilde{\mu} \; c_{\gamma} \; \overline{y_{u}}^{\mathsf{pr}} \right) \; \left( - \, s_{\gamma} \; a_{u}^{\; \mathsf{pr}} + \widetilde{\mu} \; c_{\gamma} \; y_{u}^{\; \mathsf{pr}} \right) \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; + \, \widetilde{\mu} \; c_{\gamma} \; y_{u}^{\; \mathsf{pr}} \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; + \, \widetilde{\mu} \; c_{\gamma} \; y_{u}^{\; \mathsf{pr}} \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; + \, \widetilde{\mu} \; c_{\gamma} \; y_{u}^{\; \mathsf{pr}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{p}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, , \; m_{\widetilde{q}}^{\; \mathsf{r}} \, \right] \; \mathsf{LF_{3,1,0}} \left[ \, m_{\widetilde{u}}^{\; \mathsf{
                                                                                                                                                \frac{9}{2} \; c_{\gamma}^{\; 2} \; \overline{y_{e}^{\mathsf{i} \, 2 \, \mathsf{i} \, 3}} \; y_{e}^{\; \mathsf{i} \, \mathsf{i} \, \mathsf{i} \, \mathsf{i}} \; \left( - \, s_{\gamma} \; \overline{a_{u}}^{\mathsf{pr}} + \widetilde{\mu} \; c_{\gamma} \; \overline{y_{u}}^{\mathsf{pr}} \right) \; \left( - \, s_{\gamma} \; a_{u}^{\; \mathsf{pr}} + \widetilde{\mu} \; c_{\gamma} \; y_{u}^{\; \mathsf{pr}} \right) \; \mathsf{LF_{4,1,-1}} \left[ \, \mathsf{m_{\tilde{u}}}^{\; \mathsf{r}} \, , \; \mathsf{m_{\tilde{q}}}^{\; \mathsf{p}} \, \right] \; - \; \mathsf{m_{\tilde{q}}}^{\; \mathsf{p}} \; \mathsf{m_{
                                                                                                                                         3\;c_{\gamma}^{\;2}\;\overline{y_{e}^{\;i2i3}}\;y_{e}^{\;i1i4}\;\left(-\,s_{\gamma}\;\overline{a_{u}}^{pr}\,+\,\widetilde{\mu}\;c_{\gamma}\;\overline{y_{u}}^{pr}\right)\;\left(-\,s_{\gamma}\;a_{u}^{\;pr}\,+\,\widetilde{\mu}\;c_{\gamma}\;y_{u}^{\;pr}\right)\;\mathsf{LF}_{5,1,-2}\!\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,\right]\;+\,\widetilde{\mu}^{\;2}\left[\,\mathsf{m}_{\widetilde{u}}^{\;\;r}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{\widetilde{q}}^{\;p}\,,\,\mathsf{m}_{
                                                                                                                                     \mathsf{m_1} \; \mathsf{s_{\gamma}} \; \widetilde{\mu} \; \mathsf{c_{\gamma}} \; \mathsf{g_1}^2 \; \frac{1}{\mathsf{m_e}^2} \; \overline{\mathsf{y_e}}^{\mathsf{i2i3}} \; \mathsf{y_e}^{\mathsf{i1i4}} \; \left(-\,\mathsf{c_{\gamma}}^2 + \,\mathsf{s_{\gamma}}^2\right) \; \mathsf{LF_{2,1,0}} \left[\,\widetilde{\mu}\,,\,\,\mathsf{m_1}\,\right] \; + \\
                                                                                                                                         c_{\text{Y}}\,g_{1}{}^{2}\,\frac{_{_{_{_{\!\!4}}}}}{^{_{_{\!\!6}}}^{2}}\,\overline{y_{e}}{}^{\text{i2i3}}\,y_{e}{}^{\text{i1i4}}\,\left(c_{\text{Y}}\,\text{m}_{_{\!\!4}}{}^{2}+\text{m}_{1}\,s_{\text{Y}}\,\widetilde{\mu}\,\left(c_{\text{Y}}{}^{2}-s_{\text{Y}}{}^{2}\right)\right)\,\mathsf{LF}_{3,1,-1}[\,\widetilde{\mu}\,,\,\mathsf{m}_{1}\,]\,+
                                                                                                                                         \mathsf{m_1} \; \mathsf{s_7} \; \tilde{\boldsymbol{\mu}} \; \mathsf{g_1}^2 \; \mathsf{c_7}^3 \; \overline{\mathsf{y_e}}^{\mathsf{i}2\mathsf{i}3} \; \mathsf{y_e}^{\mathsf{i}1\mathsf{i}4} \; \mathsf{LF_{3,1,0}} [\tilde{\boldsymbol{\mu}}, \; \mathsf{m_1}] \; - 2 \; \mathsf{g_1}^2 \; \mathsf{c_7}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i}2\mathsf{i}3} \; \mathsf{y_e}^{\mathsf{i}1\mathsf{i}4} \; \mathsf{LF_{4,1,-2}} [\tilde{\boldsymbol{\mu}}, \; \mathsf{m_1}] \; - 2 \; \mathsf{g_1}^2 \; \mathsf{c_7}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i}2\mathsf{i}3} \; \mathsf{y_e}^{\mathsf{i}2\mathsf{i}3} \; \mathsf{y_e}^{
                                                                                                                                         3 \mathrm{m_1} \; \mathrm{s_{\scriptscriptstyle Y}} \; \widetilde{\mu} \; \mathrm{g_1}^2 \; \mathrm{c_{\scriptscriptstyle Y}}^3 \; \overline{\mathrm{y_e}}^{\mathrm{i2i3}} \; \mathrm{y_e}^{\mathrm{i1i4}} \; \mathrm{LF_{4,1,-1}} \left[ \widetilde{\mu} \; , \; \mathrm{m_1} \right] \; + \,
                                                                                                                                         \mathsf{g_{1}}^{2} \; \mathsf{c_{\gamma}}^{2} \; \overline{\mathsf{y_{e}}}^{\mathsf{i2i3}} \; \mathsf{y_{e}}^{\mathsf{i1i4}} \; \mathsf{LF_{5,1,-3}} \left[ \widetilde{\mu} \; , \; \mathsf{m_{1}} \right] \; + \; 2 \; \mathsf{m_{1}} \; \mathsf{s_{\gamma}} \; \widetilde{\mu} \; \mathsf{g_{1}}^{2} \; \mathsf{c_{\gamma}}^{3} \; \overline{\mathsf{y_{e}}}^{\mathsf{i2i3}} \; \mathsf{y_{e}}^{\mathsf{i1i4}} \; \mathsf{LF_{5,1,-2}} \left[ \widetilde{\mu} \; , \; \mathsf{m_{1}} \right] \; + \; 2 \; \mathsf{m_{1}} \; \mathsf{s_{\gamma}} \; \widetilde{\mu} \; \mathsf{g_{1}}^{2} \; \mathsf{c_{\gamma}}^{3} \; \overline{\mathsf{y_{e}}}^{\mathsf{i2i3}} \; \mathsf{y_{e}}^{\mathsf{i1i4}} \; \mathsf{LF_{5,1,-2}} \left[ \widetilde{\mu} \; , \; \mathsf{m_{1}} \right] \; + \; 2 \; \mathsf{m_{1}} \; \mathsf{s_{\gamma}} \; \widetilde{\mu} \; \mathsf{g_{1}}^{2} \; \mathsf{c_{\gamma}}^{3} \; \overline{\mathsf{y_{e}}}^{\mathsf{i2i3}} \; \mathsf{y_{e}}^{\mathsf{i1i4}} \; \mathsf{LF_{5,1,-2}} \left[ \widetilde{\mu} \; , \; \mathsf{m_{1}} \right] \; + \; 2 \; \mathsf{m_{1}} \; \mathsf{v_{1}}^{2} \; \mathsf{v_{2}}^{2} \; \mathsf{
                                                                                                                                         3~\text{m}_2~\text{s}_{\gamma}~\widetilde{\mu}~\text{c}_{\gamma}~\text{g}_2^{~2}~\frac{_1}{_{\text{m}_0}^{~2}}~\overline{\text{y}_e^{~i\,1\,i\,4}}~\left(-\,\text{c}_{\gamma}^{~2}+\,\text{s}_{\gamma}^{~2}\right)~\text{LF}_{2,1,0}\left[\,\widetilde{\mu}\,\text{, m}_2\,\right]~+
                                                                                                                                         3\;\mathsf{m}_2\;\mathsf{s}_{\gamma}\;\tilde{\mu}\;\mathsf{g}_2^{\;2}\;\mathsf{c}_{\gamma}^{\;3}\;\overline{\mathsf{y}_e}^{\mathsf{i}\,2\mathsf{i}\,3}\;\mathsf{y}_e^{\;\mathsf{i}\,1\mathsf{i}\,4}\;\mathsf{LF}_{3,1,0}\left[\tilde{\mu}\,,\,\mathsf{m}_2\,\right]\;-\;6\;\mathsf{g}_2^{\;2}\;\mathsf{c}_{\gamma}^{\;2}\;\overline{\mathsf{y}_e}^{\mathsf{i}\,2\mathsf{i}\,3}\;\mathsf{y}_e^{\;\mathsf{i}\,1\mathsf{i}\,4}\;\mathsf{LF}_{4,1,-2}\left[\tilde{\mu}\,,\,\mathsf{m}_2\,\right]\;-\;6\;\mathsf{g}_2^{\;2}\;\mathsf{c}_{\gamma}^{\;2}\;\overline{\mathsf{y}_e}^{\mathsf{i}\,2\mathsf{i}\,3}\;\mathsf{y}_e^{\;\mathsf{i}\,1\mathsf{i}\,4}\;\mathsf{LF}_{4,1,-2}\left[\tilde{\mu}\,,\,\mathsf{m}_2\,\right]\;-\;6\;\mathsf{g}_2^{\;2}\;\mathsf{c}_{\gamma}^{\;2}\;\overline{\mathsf{y}_e}^{\mathsf{i}\,2\mathsf{i}\,3}\;\mathsf{y}_e^{\;\mathsf{i}\,1\mathsf{i}\,4}\;\mathsf{LF}_{4,1,-2}\left[\tilde{\mu}\,,\,\mathsf{m}_2\,\right]\;-\;6\;\mathsf{g}_2^{\;2}\;\mathsf{c}_{\gamma}^{\;2}\;\overline{\mathsf{y}_e}^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf{v}_e^{\;2}\;\mathsf
                                                                                                                                         9 m<sub>2</sub> s<sub>\gamma</sub> \widetilde{\mu} g<sub>2</sub><sup>2</sup> c<sub>\gamma</sub><sup>3</sup> \overline{y_e}^{i2i3} y<sub>e</sub><sup>i1i4</sup> LF<sub>4,1,-1</sub> [\widetilde{\mu}, m<sub>2</sub>] +
                                                                                                                                         3\;g_{2}^{\;2}\;c_{\gamma}^{\;2}\;\overline{y_{e}}^{i2i3}\;y_{e}^{\;i1i4}\;\mathsf{LF}_{5,1,-3}[\tilde{\mu},\;\mathsf{m}_{2}]\;+\;6\;\mathsf{m}_{2}\;s_{\gamma}\;\tilde{\mu}\;g_{2}^{\;2}\;c_{\gamma}^{\;3}\;\overline{y_{e}}^{i2i3}\;y_{e}^{\;i1i4}\;\mathsf{LF}_{5,1,-2}[\tilde{\mu},\;\mathsf{m}_{2}]\;-\;1
                                                                                                                                                \frac{1}{8}\,\,\frac{1}{\mathsf{m_{\tilde{e}}}^2}\,\mathsf{S_{\gamma}}^2\,\overline{\mathsf{y_e}}^{\mathsf{i}\,\mathsf{13}}\,\overline{\mathsf{y_e}}^{\mathsf{i}\,\mathsf{2p}}\,\mathsf{y_e}^{\mathsf{rp}}\,\mathsf{y_e}^{\mathsf{i}\,\mathsf{1i}\,\mathsf{4}}\,\mathsf{LF_{2,1,-1}}\big[\tilde{\mu},\,\mathsf{m_{\tilde{e}}}^{\mathsf{p}}\big]\,+\,\frac{1}{6}\,\,\mathsf{g_{1}}^2\,\overline{\mathsf{y_e}}^{\mathsf{i}\,\mathsf{2p}}\,\mathsf{y_e}^{\mathsf{i}\,\mathsf{1p}}\,\mathsf{LF_{2,1,0}}\big[\tilde{\mu},\,\mathsf{m_{\tilde{e}}}^{\mathsf{p}}\big]\,\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4i}\,\mathsf{4}}\,-\,\delta_{\mathsf{i}\,\mathsf{3i}\,\mathsf{4i}\,\mathsf{4i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf{5i}\,\mathsf
                                                                                                                                                \frac{1}{12} \ g_1{}^2 \ \overline{y_e}{}^{i2p} \ y_e{}^{i1p} \ \mathsf{LF}_{3,1,-1} \big[ \tilde{\mu} \, , \, \mathsf{m}_{\tilde{e}}{}^p \big] \ \delta_{i3i4} + \frac{1}{12} \ g_1{}^2 \ \overline{y_e}{}^{i2p} \ y_e{}^{i1p} \ \mathsf{LF}_{4,1,-2} \big[ \tilde{\mu} \, , \, \mathsf{m}_{\tilde{e}}{}^p \big] \ \delta_{i3i4} - \frac{1}{12} \ g_1{}^2 \ \overline{y_e}{}^{i2p} \ y_e{}^{i1p} \ \mathsf{LF}_{4,1,-2} \big[ \tilde{\mu} \, , \, \mathsf{m}_{\tilde{e}}{}^p \big] \ \delta_{i3i4} - \frac{1}{12} \ g_1{}^2 \ \overline{y_e}{}^{i2p} \ y_e{}^{i2p} \ y_e{}^{i2p} \ \mathsf{LF}_{4,1,-2} \big[ \tilde{\mu} \, , \, \mathsf{m}_{\tilde{e}}{}^p \big] \ \delta_{i3i4} - \frac{1}{12} \ g_1{}^2 \ \overline{y_e}{}^{i2p} \ y_e{}^{i2p} \ y_e{}^{i2p} \ \mathsf{LF}_{4,1,-2} \big[ \tilde{\mu} \, , \, \mathsf{m}_{\tilde{e}}{}^p \big] \ \delta_{i3i4} - \frac{1}{12} \ g_1{}^2 \ \overline{y_e}{}^{i2p} \ y_e{}^{i2p} \ y_e{}^{i2p} \ \mathsf{LF}_{4,1,-2} \big[ \tilde{\mu} \, , \, \, \mathsf{m}_{\tilde{e}}{}^p \big] \ \delta_{i3i4} - \frac{1}{12} \ y_e{}^{i2p} \ y_e{}^{i2
                                                                                                                                            \frac{1}{8}\;\frac{1}{\mathsf{m_e}^2}\;\mathsf{S_{\gamma}}^2\;\overline{\mathsf{y_e}}^\mathsf{pr}\;\overline{\mathsf{y_e}}^\mathsf{i2i3}\;\mathsf{y_e}^\mathsf{pi4}\;\mathsf{y_e}^\mathsf{i1r}\;\mathsf{LF_{2,1,-1}}\!\left[\tilde{\mu}\,,\,\mathsf{m_e}^\mathsf{-r}\right]\;-
                                                                                                                                                \frac{1}{4} \; \frac{1}{m_\text{b}^2} \; \text{S}_\text{Y}^{\; 2} \; \overline{\text{y}_\text{e}}^\text{pr} \; \overline{\text{y}_\text{e}}^\text{i2i3} \; \text{y}_\text{e}^\text{pi4} \; \text{y}_\text{e}^\text{i1r} \; \text{LF}_{2,1,-1} \left[ \widetilde{\mu} \, , \; \textbf{m}_{\widetilde{\textbf{l}}}^{\; p} \right] \; + \\
                                                                                                                                            \frac{1}{12} \ g_1{}^2 \ \overline{y_e}{}^{pi3} \ y_e{}^{pi4} \ \mathsf{LF}_{2,1,0} \big[ \tilde{\mu} \,, \, \mathsf{m}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} - \frac{5}{12} \ g_1{}^2 \ \overline{y_e}{}^{pi3} \ y_e{}^{pi4} \ \mathsf{LF}_{3,1,-1} \big[ \tilde{\mu} \,, \, \mathsf{m}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\text{ili2}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\tilde{l}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\tilde{l}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\tilde{l}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\tilde{l}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\tilde{l}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta_{\tilde{l}} + \frac{1}{12} \ \mathcal{L}_{11,0} \big[ \tilde{\mu} \,, \, \tilde{\mu}_{\tilde{l}}{}^p \big] \ \delta
                                                                                                                                            \frac{1}{6} \ g_{1}{}^{2} \ \overline{y_{e}}{}^{pi3} \ y_{e}{}^{pi4} \ \mathsf{LF}_{4,1,-2} \big[ \tilde{\mu} \,, \, \mathsf{m}_{\tilde{l}}{}^{p} \big] \ \delta_{i1i2} - \frac{1}{4} \ \frac{1}{\mathfrak{m}_{_{0}}{}^{2}} \ \mathsf{S}_{_{Y}}{}^{2} \ \overline{y_{e}}{}^{ri3} \ \overline{y_{e}}{}^{i2p} \ y_{e}{}^{rp} \ y_{e}{}^{i1i4} \ \mathsf{LF}_{2,1,-1} \big[ \tilde{\mu} \,, \, \mathsf{m}_{\tilde{l}}{}^{r} \big] - \frac{1}{4} \ \frac{1}{\mathfrak{m}_{_{0}}{}^{2}} \ \mathsf{S}_{_{Y}}{}^{2} \ \overline{y_{e}}{}^{ri3} \ \overline{y_{e}}{}^{i2p} \ y_{e}{}^{rp} \ y_{e}{}^{i1i4} \ \mathsf{LF}_{2,1,-1} \big[ \tilde{\mu} \,, \, \mathsf{m}_{\tilde{l}}{}^{r} \big] - \frac{1}{4} \ \frac{1}{\mathfrak{m}_{_{0}}{}^{2}} \ \mathsf{S}_{_{Y}}{}^{2} \ \overline{y_{e}}{}^{ri3} \ \overline{y_{e}}{}^{i2p} \ y_{e}{}^{rp} \ y_{e}{}^{rp} \ y_{e}{}^{rp} \ y_{e}{}^{rp} \ \mathsf{M}_{\tilde{l}}{}^{r} \big] - \frac{1}{4} \ \frac{1}{2} \ \mathsf{M}_{\tilde{l}}{}^{r} \big[ \mathsf{M}_{\tilde{l}}{}^{r} \big] + \frac{1}{4} \ \mathsf{M}_{\tilde{l}}{}^{r} \big[ \mathsf
                                                                                                                                            \frac{1}{2} \; m_1 \; s_{\gamma} \; g_1{}^2 \; \frac{1}{m_{_0}{}^2} \; y_e{}^{\text{ili4}} \; \left( s_{\gamma} \; \overline{a_e}{}^{\text{i2i3}} + \widetilde{\mu} \; c_{\gamma} \; \overline{y_e}{}^{\text{i2i3}} \right) \; \mathsf{LF}_{1,1,1,0} \left[ \, m_1 \, , \; m_{_{\tilde{e}}}{}^{\text{i3}} \, , \; m_{_{\tilde{l}}}{}^{\text{i2}} \, \right] \; + \\ \frac{1}{2} \; m_1 \; s_{\gamma} \; g_1{}^2 \; \frac{1}{m_{_0}{}^2} \; y_e{}^{\text{ili4}} \; \left( s_{\gamma} \; \overline{a_e}{}^{\text{i2i3}} + \widetilde{\mu} \; c_{\gamma} \; \overline{y_e}{}^{\text{i2i3}} \right) \; \mathsf{LF}_{1,1,1,0} \left[ \, m_1 \, , \; m_{_{\tilde{e}}}{}^{\text{i3}} \, , \; m_{_{\tilde{l}}}{}^{\text{i2}} \, \right] \; + \\ \frac{1}{2} \; m_1 \; s_{\gamma} \; g_1{}^2 \; \frac{1}{m_0} \; \frac{1}{m
                                                                                                                                            \frac{1}{8} \; m_1 \; c_{\gamma} \; g_1^{\; 2} \; y_e^{\; \text{ili4}} \; \left( c_{\gamma} \; \overline{a_e}^{\; \text{i2i3}} - s_{\gamma} \; \widetilde{\mu} \; \overline{y_e}^{\; \text{i2i3}} \right) \; LF_{2,2,1,-1} \big[ \, m_1 \, , \; m_{\tilde{e}}^{\; \text{i3}} \, , \; m_{\tilde{l}}^{\; \text{i2}} \, \big] \; - \, m_{\tilde{e}}^{\; \text{i2i3}} \, + \, m_{\tilde{e}}^{\; \text{i3i}} \, , \; m_{\tilde{e}}^{\; \text{i2i3}} \, + \, m_{\tilde{e}}^{\; \text{i2i3}} \, , \; 
                                                                                                                                            \frac{1}{2} g_1^2 \frac{1}{m_o^2} s_{\gamma}^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{1,1,1,-1}[m_1,m_{\tilde{e}}^{i3},\widetilde{\mu}] +
                                                                                                                                            \frac{1}{2}~\text{m}_{1}~\text{s}_{\gamma}~\tilde{\mu}~\text{c}_{\gamma}~\text{g}_{1}^{2}~\frac{1}{\text{m}_{\text{e}}^{2}}~\overline{\text{y}_{\text{e}}}^{\text{i2i3}}~\text{y}_{\text{e}}^{\text{i1i4}}~\text{LF}_{1,1,1,0}\big[\,\text{m}_{1},~\text{m}_{\tilde{\text{e}}}^{\text{i3}},~\tilde{\mu}\,\big]~-
                                                                                                                                            \frac{1}{s} \; m_1 \; c_{\gamma} \; g_1^{\; 2} \; \overline{y_e}^{i\, 2\, i\, 3} \; \left( c_{\gamma} \; a_e^{\; i\, 1\, i\, 4} - s_{\gamma} \; \widetilde{\mu} \; y_e^{\; i\, 1\, i\, 4} \right) \; LF_{2,\, 2,\, 1,\, -1} \left[ m_1 \; , \; m_e^{\; i\, 4} \; , \; m_{\tilde{l}}^{\; i\, 1} \right] \; - \; m_e^{\; i\, 1} \; \left( c_{\gamma} \; a_e^{\; i\, 1\, i\, 4} - s_{\gamma} \; \widetilde{\mu} \; y_e^{\; i\, 1\, i\, 4} \right) \; LF_{2,\, 2,\, 1,\, -1} \left[ m_1 \; , \; m_e^{\; i\, 4} \; , \; m_{\tilde{l}}^{\; i\, 1} \right] \; - \; m_e^{\; i\, 1} \; \left( c_{\gamma} \; a_e^{\; i\, 1\, i\, 4} - s_{\gamma} \; \widetilde{\mu} \; y_e^{\; i\, 1\, i\, 4} \right) \; LF_{2,\, 2,\, 1,\, 1,\, 1} \left[ m_1 \; , \; m_e^{\; i\, 4} \; , \; m_{\tilde{l}}^{\; i\, 1} \right] \; - \; m_e^{\; i\, 1} \; \left( c_{\gamma} \; a_e^{\; i\, 1\, i\, 4} - s_{\gamma} \; \widetilde{\mu} \; y_e^{\; i\, 1\, i\, 4} \right) \; LF_{2,\, 2,\, 1,\, 1,\, 1} \left[ m_1 \; , \; m_e^{\; i\, 1\, 4} \; , \; m_{\tilde{l}}^{\; i\, 1} \right] \; - \; m_e^{\; i\, 1} \; \left( c_{\gamma} \; a_e^{\; i\, 1\, i\, 4} - s_{\gamma} \; \widetilde{\mu} \; y_e^{\; i\, 1\, i\, 4} \right) \; LF_{2,\, 2,\, 1,\, 1,\, 1} \left[ m_1 \; , \; m_e^{\; i\, 1\, 4} \; , \; m_{\tilde{l}}^{\; i\, 1} \right] \; - \; m_e^{\; i\, 1} \; \left( c_{\gamma} \; a_e^{\; i\, 1\, i\, 4} - s_{\gamma} \; \widetilde{\mu} \; y_e^{\; i\, 1\, i\, 4} \right) \; LF_{2,\, 2,\, 1,\, 1,\, 1} \left[ m_1 \; , \; m_e^{\; i\, 1\, 4} \; , \; m_{\tilde{l}}^{\; i\, 1} \; , \; m_{\tilde{l}}^{\; i\, 1} \; \right] \; - \; m_e^{\; i\, 1\, 1\, 1} \; . 
                                                                                                                                                \frac{1}{4}\; {\sf g_1}^4\; {\sf LF}_{2,1,1,-1}\big[\,{\sf m_1},\, {\sf m_{\tilde{\sf e}}}^{\dot{\mathsf{i}}\, 4},\, {\sf m_{\tilde{\mathsf{i}}}}^{\dot{\mathsf{i}}\, 2}\,\big]\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}2}\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{3}}\dot{\mathsf{1}}4} - \frac{1}{2}\; {\sf g_1}^4\; {\sf m_1}^2\; {\sf LF}_{2,1,1,0}\big[\,{\sf m_1},\, {\sf m_{\tilde{\mathsf{e}}}}^{\dot{\mathsf{i}}\, 4},\, {\sf m_{\tilde{\mathsf{i}}}}^{\dot{\mathsf{i}}\, 2}\,\big]\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}2}\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{3}}\dot{\mathsf{1}}4} - \frac{1}{2}\; {\sf g_1}^4\; {\sf m_1}^2\; {\sf LF}_{2,1,1,0}\big[\,{\sf m_1},\, {\sf m_{\tilde{\mathsf{e}}}}^{\dot{\mathsf{i}}\, 4},\, {\sf m_{\tilde{\mathsf{i}}}}^{\dot{\mathsf{i}}\, 2}\,\big]\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}2}\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{3}}\dot{\mathsf{1}}4} - \frac{1}{2}\; {\sf g_1}^4\; {\sf m_1}^2\; {\sf LF}_{2,1,1,0}\big[\,{\sf m_1},\, {\sf m_{\tilde{\mathsf{e}}}}^{\dot{\mathsf{i}}\, 4},\, {\sf m_{\tilde{\mathsf{i}}}}^{\dot{\mathsf{i}}\, 2}\,\big]\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}2}\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{3}}\dot{\mathsf{1}}4} - \frac{1}{2}\; {\sf g_1}^4\; {\sf m_2}^2\; {\sf LF}_{2,1,1,0}\big[\,{\sf m_1},\, {\sf m_{\tilde{\mathsf{e}}}}^{\dot{\mathsf{i}}\, 4},\, {\sf m_{\tilde{\mathsf{i}}}}^{\dot{\mathsf{i}}\, 2}\,\big]\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}2}\; \delta_{\dot{\mathsf{1}}\dot{\mathsf{3}}\dot{\mathsf{1}}4} - \frac{1}{2}\; {\sf m_2}^2\; {\sf m_2}^2\; {\sf m_2}^2\, {\sf m_2}^
                                                                                                                                                                                                                                                                                  \frac{1}{m_{\text{m}^2}} \; {s_{\text{Y}}}^2 \; \overline{y_e}^{\text{i2i3}} \; {y_e}^{\text{i1i4}} \; \mathsf{LF}_{1,1,1,-1} \big[ \, \mathsf{m}_1 \,, \; \mathsf{m}_{\tilde{e}}^{\text{i2i3}} \,
                                                                                                                                            \frac{1}{8}\; m_{1}\; c_{\gamma}\; g_{1}^{2}\; \overline{y_{e}}^{i2i3}\; \left(c_{\gamma}\; a_{e}^{\;i1i4} - s_{\gamma}\; \widetilde{\mu}\; y_{e}^{\;i1i4}\right)\; LF_{2,2,1,-1}\big[m_{1}\;,\; m_{\tilde{l}}^{\;i1}\;,\; m_{\tilde{e}}^{\;i4}\big]\; + \frac{1}{8}\; m_{1}\; c_{\gamma}\; g_{1}^{2}\; \overline{y_{e}}^{i2i3}\; \left(c_{\gamma}\; a_{e}^{\;i1i4} - s_{\gamma}\; \widetilde{\mu}\; y_{e}^{\;i1i4}\right)\; LF_{2,2,1,-1}\big[m_{1}\;,\; m_{\tilde{l}}^{\;i1}\;,\; m_{\tilde{e}}^{\;i4}\big]\; + \frac{1}{8}\; m_{1}\; c_{\gamma}\; g_{1}^{2}\; \overline{y_{e}}^{i2i3}\; \left(c_{\gamma}\; a_{e}^{\;i1i4} - s_{\gamma}\; \widetilde{\mu}\; y_{e}^{\;i1i4}\right)\; LF_{2,2,1,-1}\big[m_{1}\;,\; m_{\tilde{l}}^{\;i1}\;,\; m_{\tilde{e}}^{\;i4}\big]\; + \frac{1}{8}\; m_{1}\; c_{\gamma}\; g_{1}^{2}\; \overline{y_{e}}^{\;i2i3}\; \left(c_{\gamma}\; a_{e}^{\;i1i4} - s_{\gamma}\; \widetilde{\mu}\; y_{e}^{\;i1i4}\right)\; LF_{2,2,1,-1}\big[m_{1}\;,\; m_{\tilde{l}}^{\;i1}\;,\; m_{\tilde{e}}^{\;i1i4}\big]\; + \frac{1}{8}\; m_{1}\; c_{\gamma}\; g_{1}^{2}\; \overline{y_{e}}^{\;i2i3}\; \left(c_{\gamma}\; a_{e}^{\;i1i4} - s_{\gamma}\; \widetilde{\mu}\; y_{e}^{\;i1i4}\right)\; LF_{2,2,1,-1}\big[m_{1}\;,\; m_{\tilde{l}}^{\;i1}\;,\; m_{\tilde{l}}^{\;i1}
                                                                                                                                            \frac{1}{4}~g_1^2~\frac{1}{m_e^2}~s_{\gamma}^2~\overline{y_e}^{i2i3}~y_e^{i1i4}~\mathsf{LF_{1,1,1,-1}}\big[m_1,~m_{\tilde{l}}^{i1},~\tilde{\mu}\big] –
                                                                                                                                            \frac{1}{4}~\text{m}_1~\text{s}_{\text{y}}~\tilde{\mu}~\text{c}_{\text{y}}~\text{g}_1^2~\frac{1}{\text{m}_{\text{o}}^2}~\overline{\text{ye}}^{\text{i}2\text{i}3}~\text{ye}^{\text{i}1\text{i}4}~\text{LF}_{1,1,1,0}\left[\text{m}_1,~\text{m}_{\tilde{l}}^{\text{i}1},~\tilde{\mu}\right]~\text{+}
                                                                                                                                                \frac{1}{8}\;\mathsf{m_1}\;\mathsf{c_{Y}}\;\mathsf{g_1}^2\;\mathsf{y_e}^{\mathsf{i}1\mathsf{i}4}\;\left(\mathsf{c_{Y}}\;\overline{\mathsf{a_e}}^{\mathsf{i}2\mathsf{i}3}-\mathsf{s_{Y}}\;\widetilde{\mu}\;\overline{\mathsf{y_e}}^{\mathsf{i}2\mathsf{i}3}\right)\;\mathsf{LF_{2,2,1,-1}}\big[\mathsf{m_1},\;\mathsf{m_{\tilde{l}}}^{\mathsf{i}2},\;\mathsf{m_{\tilde{e}}}^{\mathsf{i}3}\big]\;\mathsf{+}\;
                                                                                                                                            \frac{1}{4}~g_1^2~\frac{1}{m_e^2}~s_\gamma^2~\overline{y_e}^{i2i3}~y_e^{i1i4}~LF_{1,1,1,-1}\big[m_1,~m_{\tilde{l}}^{i2},~\tilde{\mu}\big] –
                                                                                                                                            \frac{1}{4}\;\mathsf{m_1}\;\mathsf{s_{\scriptscriptstyle Y}}\;\tilde{\boldsymbol{\mu}}\;\mathsf{c_{\scriptscriptstyle Y}}\;\mathsf{g_1}^2\;\frac{1}{\mathsf{m_0}^2}\;\overline{\mathsf{y_e}}^{\mathsf{i2i3}}\;\mathsf{y_e}^{\mathsf{i1i4}}\;\mathsf{LF_{1,1,1,0}}\big[\mathsf{m_1},\;\mathsf{m_{\tilde{l}}}^{\mathsf{i2}},\;\tilde{\boldsymbol{\mu}}\big]\;\mathsf{-}
                                                                                                                                            \tfrac{1}{4}~g_1^{~2}~c_{\gamma}^{~2}~\overline{y_e}^{\text{i2i3}}~y_e^{\text{i1i4}}~\mathsf{LF}_{2,2,1,\text{-}2}\big[\mathsf{m}_1\text{, }\widetilde{\mu}\text{, }\mathsf{m}_{\tilde{e}}^{\text{i3}}\big]~\text{-}
                                                                                                                                            \frac{1}{4} m_1 s_{\gamma} \tilde{\mu} c_{\gamma} g_1^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{2,2,1,-1}[m_1, \tilde{\mu}, m_{\tilde{e}}^{i3}] -
                                                                                                                                                \frac{1}{4} g_1^2 c_{\gamma}^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{2,2,1,-2}[m_1, \tilde{\mu}, m_{\tilde{e}}^{i4}] -
                                                                                                                                            \frac{1}{4}\;\mathsf{m_1}\;\mathsf{s_{\scriptscriptstyle Y}}\;\tilde{\mu}\;\mathsf{c_{\scriptscriptstyle Y}}\;\mathsf{g_1}^2\;\overline{\mathsf{y_e}}^{\mathsf{i2i3}}\;\mathsf{y_e}^{\mathsf{i1i4}}\;\mathsf{LF_{2,2,1,-1}}\big[\mathsf{m_1},\;\tilde{\mu},\;\mathsf{m_{\tilde{e}}}^{\mathsf{i4}}\big]\;\mathsf{+}
                                                                                                                                            \frac{1}{8}~g_1^{~2}~c_{\gamma}^{~2}~\overline{y_e}^{i2i3}~y_e^{~i1i4}~LF_{2,2,1,-2}\big[\,m_1\,,~\widetilde{\mu}\,,~m_{\bar{l}}^{~i1}\big] +
                                                                                                                                                \frac{1}{8} m_1 s_{\gamma} \tilde{\mu} c_{\gamma} g_1^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{2,2,1,-1}[m_1, \tilde{\mu}, m_{\tilde{l}}^{i1}] +
                                                                                                                                            \frac{1}{g} g_1^2 c_{\gamma}^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{2,2,1,-2}[m_1, \widetilde{\mu}, m_{\tilde{l}}^{i2}] +
                                                                                                                                                \frac{1}{8}\;\mathsf{m_1}\;\mathsf{s_{\scriptscriptstyle Y}}\;\tilde{\boldsymbol{\mu}}\;\mathsf{c_{\scriptscriptstyle Y}}\;\mathsf{g_1}^2\;\overline{\mathsf{y_e}}^{\mathsf{i2i3}}\;\mathsf{y_e}^{\mathsf{i1i4}}\;\mathsf{LF_{2,2,1,-1}}\big[\mathsf{m_1},\;\tilde{\boldsymbol{\mu}},\;\mathsf{m_{\tilde{l}}}^{\mathsf{i2}}\big]\;-
                                                                                                                                            \frac{3}{4}~g_2^2~\frac{1}{m_o^2}~s_\gamma^2~\overline{y_e}^{i2i3}~y_e^{i1i4}~\mathsf{LF}_{1,1,1,-1}\big[m_2,~m_{\tilde{l}}^{i1},~\tilde{\mu}\big]~+
                                                                                                                                            \frac{\text{3}}{\text{4}}~\text{m}_2~\text{s}_{\text{Y}}~\tilde{\mu}~\text{c}_{\text{Y}}~\text{g}_2^{\text{2}}~\frac{\text{1}}{\text{m}_{\text{o}}^{\text{2}}}~\overline{\text{y}_{\text{e}}}^{\text{i}2\text{i}3}~\text{y}_{\text{e}}^{\text{i}1\text{i}4}~\text{LF}_{\text{1,1,1,0}}\big[\,\text{m}_2\,,~\text{m}_{\tilde{l}}^{\text{i}1}\,,~\tilde{\mu}\,\big]~-
                                                                                                                                            \frac{3}{4}~g_2^2~\frac{1}{m_o^2}~s_\gamma^2~\overline{y_e}^{i2i3}~y_e^{i1i4}~\mathsf{LF}_{1,1,1,-1}\big[\,\mathsf{m}_2\,,~\mathsf{m}_{\bar{l}}^{~i2}\,,~\widetilde{\mu}\,\big]~+
                                                                                                                                            \frac{\text{3}}{\text{4}}~\text{m}_2~\text{s}_{\text{Y}}~\tilde{\mu}~\text{c}_{\text{Y}}~\text{g}_2^{\text{2}}~\frac{1}{\text{m}_{\text{o}}^{\text{2}}}~\overline{\text{y}_{\text{e}}}^{\text{i2i3}}~\text{y}_{\text{e}}^{\text{i1i4}}~\text{LF}_{\text{1,1,1,0}}\big[\text{m}_2\,,~\text{m}_{\bar{\text{l}}}^{\text{i2}},~\tilde{\mu}\big]~-
                                                                                                                                                                               g_2^2 \, c_\gamma^2 \, \overline{y_e}^{i2i3} \, y_e^{i1i4} \, LF_{2,2,1,-2} \big[ m_2, \, \widetilde{\mu}, \, m_{\widetilde{l}}^{\,\,i1} \big] -
                                                                                                                                                                               \mathbf{m_2} \; \mathbf{s_{\gamma}} \; \tilde{\boldsymbol{\mu}} \; \mathbf{c_{\gamma}} \; \mathbf{g_2}^2 \; \overline{\mathbf{y_e}}^{\mathtt{i2i3}} \; \mathbf{y_e}^{\mathtt{i1i4}} \; \mathsf{LF_{2,2,1,-1}} \big[ \, \mathbf{m_2} \, , \; \tilde{\boldsymbol{\mu}} \, , \; \mathbf{m_{\tilde{l}}}^{\mathtt{i1}} \big] \; - \; \mathbf{m_{2}} \; \mathbf{m
                                                                                                                                                                               g_2^2 c_{\gamma}^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{2,2,1,-2}[m_2, \tilde{\mu}, m_{\tilde{l}}^{i2}] -
                                                                                                                                                                               \mathbf{m_2} \; \mathbf{s_{\gamma}} \; \widetilde{\boldsymbol{\mu}} \; \mathbf{c_{\gamma}} \; \mathbf{g_2}^2 \; \overline{\mathbf{y_e}}^{\mathsf{i2i3}} \; \mathbf{y_e}^{\mathsf{i1i4}} \; \mathsf{LF_{2,2,1,-1}} \big[ \, \mathbf{m_2} \, , \; \widetilde{\boldsymbol{\mu}} \, , \; \mathbf{m_{\tilde{l}}}^{\mathsf{i2}} \big] \; + \\
                                                                                                                                                                                   \mathsf{m_1}\; c_{\gamma}\; \mathsf{g_1}^2\; \mathsf{y_e}^{\mathsf{ili4}}\; \left(-\,c_{\gamma}\; \overline{a_e}^{\mathsf{i2i3}}\,+\,\mathsf{s_{\gamma}}\; \widetilde{\mu}\; \overline{\mathsf{y_e}}^{\mathsf{i2i3}}\right)\; \mathsf{LF_{2,1,1,0}}\!\left[\,\mathsf{m_{\tilde{e}}}^{\mathsf{i3}}\;\!,\; \mathsf{m_1},\; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}}\right]\,+\, \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \left(-\,c_{\gamma}\; \overline{a_e}^{\mathsf{i2i3}}\,+\, \mathsf{s_{\gamma}}\; \widetilde{\mu}\; \overline{\mathsf{y_e}}^{\mathsf{i2i3}}\right)\; \mathsf{LF_{2,1,1,0}}\left[\,\mathsf{m_{\tilde{e}}}^{\mathsf{i3}}\;\!,\; \mathsf{m_1},\; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}}\right]\,+\, \mathsf{l_{l_1}}^{\mathsf{i2}} \left(-\,c_{\gamma}\; \overline{a_e}^{\mathsf{i2i3}}\,+\, \mathsf{l_{l_2}}^{\mathsf{i2i3}}\right)\; \mathsf{LF_{2,1,1,0}}\left[\,\mathsf{m_{\tilde{e}}}^{\mathsf{i3}}\;\!,\; \mathsf{m_1},\; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}}\right]\,+\, \mathsf{l_{l_1}}^{\mathsf{i2}} \left(-\,c_{\gamma}\; \overline{a_e}^{\mathsf{i2i3}}\,+\, \mathsf{l_{l_2}}^{\mathsf{i2i3}}\right)\; \mathsf{l_{l_2}}^{\mathsf{i2i3}}\right)\; \mathsf{LF_{2,1,1,0}}\left[\,\mathsf{m_{\tilde{e}}}^{\mathsf{i3}}\;\!,\; \mathsf{m_1},\; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}}\right] +\, \mathsf{l_{l_2}}^{\mathsf{i2i3}} \left(-\,c_{\gamma}\; \overline{a_e}^{\mathsf{i2i3}}\,+\, \mathsf{l_{l_2}}^{\mathsf{i2i3}}\right)\; \mathsf{l_{l_2}}^{\mathsf{i2i3}}\right] \; \mathsf{l_{l_2}}^{\mathsf{i2i3}}
                                                                                                                                                                               \mathsf{m_1} \; \mathsf{c_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_e}^{\mathsf{ili4}} \; \left( \mathsf{c_{Y}} \; \overline{\mathsf{a_e}}^{\mathsf{i2i3}} - \mathsf{s_{Y}} \; \widetilde{\mu} \; \overline{\mathsf{y_e}}^{\mathsf{i2i3}} \right) \; \mathsf{LF_{3,1,1,-1}} \big[ \, \mathsf{m_{\tilde{e}}}^{\mathsf{i3}} \text{, } \mathsf{m_1} \text{, } \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \big] \; + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \, \mathsf{m_{\tilde{l}}} \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \big] \; + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \, \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \, \mathsf{m_{\tilde{l}}}^{\mathsf{i3}} + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i3}} \, \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i2}} \mathsf{m_{\tilde
                                                                                                                                                                                   \mathsf{m_1} \; \mathsf{c_{Y}} \; \mathsf{g_1}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i2i3}} \; \left( - \, \mathsf{c_{Y}} \; \mathsf{a_e}^{\mathsf{i1i4}} + \, \mathsf{s_{Y}} \; \widetilde{\mu} \; \mathsf{y_e}^{\mathsf{i1i4}} \right) \; \mathsf{LF_{2,1,1,0}} \left[ \, \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\tilde{l}}}^{\mathsf{i1}} \, \right] \; + \; \mathsf{m_{\tilde{l}}}^{\mathsf{i1}} \; + \; \mathsf
                                                                                                                                                                                   \mathsf{m_1} \; \mathsf{c_{Y}} \; \mathsf{g_1}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i2i3}} \; \left( \mathsf{c_{Y}} \; \mathsf{a_e}^{\mathsf{i1i4}} - \mathsf{s_{Y}} \, \widetilde{\boldsymbol{\mu}} \; \mathsf{y_e}^{\mathsf{i1i4}} \right) \; \mathsf{LF_{3,1,1,-1}} \big[ \, \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \, , \; \mathsf{m_1} \, , \; \mathsf{m_{\tilde{1}}}^{\mathsf{i1}} \big] \; + \; \mathsf{m_{\tilde{1}}}^{\mathsf{i1}} \, , \; \mathsf{m_{
                                                                                                                                                                                   \mathbf{m_{1}}\;c_{\gamma}\;g_{1}^{2}\;\overline{y_{e}^{\text{i2i3}}}\;\left(-\,c_{\gamma}\;a_{e}^{\text{i1i4}}\,+\,s_{\gamma}\;\widetilde{\mu}\;y_{e}^{\text{i1i4}}\right)\;\mathsf{LF_{2,1,1,0}}\left[\,\mathsf{m_{\tilde{l}}}^{\text{i1}}\,,\;\mathsf{m_{1}},\;\mathsf{m_{\tilde{e}}}^{\text{i4}}\,\right]\,+\,s_{\gamma}\;\widetilde{\mu}\;y_{e}^{\text{i1i4}}\right)\;\mathsf{LF_{2,1,1,0}}\left[\,\mathsf{m_{\tilde{l}}}^{\text{i1}}\,,\;\mathsf{m_{1}},\;\mathsf{m_{\tilde{e}}}^{\text{i4}}\,\right]\,+\,s_{\gamma}\;\widetilde{\mu}\;y_{e}^{\text{i1i4}}\right]
                                                                                                                                                                               \mathsf{m_1} \; \mathsf{c_{Y}} \; \mathsf{g_1}^2 \; \overline{\mathsf{y_e}}^{\mathsf{i2i3}} \; \left( \mathsf{c_{Y}} \; \mathsf{a_e}^{\mathsf{i1i4}} - \mathsf{s_{Y}} \; \widetilde{\boldsymbol{\mu}} \; \mathsf{y_e}^{\mathsf{i1i4}} \right) \; \mathsf{LF_{3,1,1,-1}} \big[ \, \mathsf{m_{\tilde{l}}}^{\mathsf{i1}}, \; \mathsf{m_1}, \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \big] \; + \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \big] \; + \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \, \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} + \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \big] \; + \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \, \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} + \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \big] \; + \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} \, \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} + \; \mathsf{m_{\tilde{e}}}^{\mathsf{i4}} + 
                                                                                                                                                                               \mathsf{m_{1}}\;c_{\gamma}\;g_{1}^{2}\;y_{e}^{\text{ili4}}\;\left(-\,c_{\gamma}\;\overline{a_{e}}^{\text{i}2\text{i}3}\,+\,s_{\gamma}\;\widetilde{\mu}\;\overline{y_{e}}^{\text{i}2\text{i}3}\right)\;\mathsf{LF_{2,1,1,0}}\!\left[\,\mathsf{m_{\tilde{l}}}^{\text{i}2},\;\mathsf{m_{1}},\;\mathsf{m_{\tilde{e}}}^{\text{i}3}\,\right]\,+\,\mathsf{m_{\tilde{e}}}^{\text{i}3}\left(-\,c_{\gamma}\;\overline{a_{e}}^{\text{i}2\text{i}3}\,+\,s_{\gamma}\;\widetilde{\mu}\;\overline{y_{e}}^{\text{i}2\text{i}3}\right)
                                                                                                                                            \frac{1}{4} \; \mathsf{m_1} \; \mathsf{c_{Y}} \; \mathsf{g_1}^2 \; \mathsf{y_e}^{\mathsf{ili4}} \; \left( \mathsf{c_{Y}} \; \overline{\mathsf{a_e}}^{\mathsf{i2i3}} - \mathsf{s_{Y}} \; \widetilde{\mu} \; \overline{\mathsf{y_e}}^{\mathsf{i2i3}} \right) \; \mathsf{LF_{3,1,1,-1}} \left[ \mathsf{m_{\tilde{l}}}^{\mathsf{i2}}, \; \mathsf{m_1}, \; \mathsf{m_{\tilde{e}}}^{\mathsf{i3}} \right] \; - \; \mathsf{m_{\tilde{e}}}^{\mathsf{i3}} \; \mathsf{m_{\tilde{e}}}^{\mathsf{i3}} \; \mathsf{m_{\tilde{e}}}^{\mathsf{i3}} \; \mathsf{m_{\tilde{e}}}^{\mathsf{i3}} \right] \; - \; \mathsf{m_{\tilde{e}}}^{\mathsf{i3}} \; \mathsf{m_{\tilde{e}}}^
                                                                                                                                                \frac{1}{4} \overline{y_e}^{ri3} \overline{y_e}^{i2p} y_e^{ri4} y_e^{i1p} LF_{2,1,1,-1}[\tilde{\mu}, m_{\tilde{e}}^p, m_{\tilde{l}}^r] -
                                                                                                                                            \frac{1}{4} g_1^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{1,1,1,1,-1}[m_1, m_{\tilde{e}}^{i3}, m_{\tilde{l}}^{i1}, \tilde{\mu}] +
                                                                                                                                                \frac{1}{2} g_1^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{1,1,1,1,-1}[m_1, m_{\tilde{e}}^{i4}, m_{\tilde{e}}^{i3}, \tilde{\mu}] -
                                                                                                                                                \frac{1}{4}\;\mathsf{g_1}^2\;\overline{\mathsf{y_e}^{\mathsf{i2i3}}}\;\mathsf{y_e}^{\mathsf{i1i4}}\;\mathsf{LF_{\mathsf{1,1,1,1,-1}}}\big[\mathsf{m_1},\,\mathsf{m_{\tilde{e}}^{\mathsf{i4}}},\,\mathsf{m_{\tilde{l}}^{\mathsf{i2}}},\,\tilde{\mu}\big]\;\mathsf{+}
                                                                                                                                                \frac{1}{8}~g_1{}^2~\overline{y_e}^{i2i3}~y_e{}^{i1i4}~\mathsf{LF}_{1,1,1,1,-1}\big[\mathsf{m}_1,~\mathsf{m}_{\tilde{l}}{}^{i2},~\mathsf{m}_{\tilde{l}}{}^{i1},~\tilde{\mu}\big]~+
                                                                                                                                                                               g_2^2 \overline{y_e}^{i2i3} y_e^{i1i4} LF_{1,1,1,1,-1}[m_2, m_{\tilde{l}}^{i2}, m_{\tilde{l}}^{i1}, \tilde{\mu}]
```