$$\begin{split} &\frac{1}{2} \sum_{p} g_{1}{}^{3} \text{ LF}_{2,0} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{1}{4} \sum_{p} g_{1}{}^{3} \text{ LF}_{2,0} \left[m_{\tilde{l}}{}^{p} \right] + \frac{1}{6} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{l}}{}^{p} \right] - \frac{1}{12} \sum_{p} g_{1}{}^{3} \text{ LF}_{2,0} \left[m_{\tilde{u}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{2,0} \left[m_{\tilde{u}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{2,0} \left[m_{\tilde{u}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{2,0} \left[m_{\tilde{u}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] - \frac{2}{3} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p} g_{1}{}^{3} \text{ LF}_{3,-1} \left[m_{\tilde{e}}{}^{p} \right] + \frac{1}{18} \sum_{p$$

 $g_1 \rightarrow g_1 + \frac{1}{16\pi^2} \left(\frac{19}{12} g_1^3 - \frac{1}{6} \sum_p g_1^3 LF_{2,0} \left[m_{\tilde{d}}^{p} \right] + \frac{1}{9} \sum_p g_1^3 LF_{3,-1} \left[m_{\tilde{d}}^{p} \right] - \frac{1}{9} \left[m_{\tilde{d}}^{p} \right] \right)$

 $\frac{4}{9} \sum_{\mathbf{p}} \mathbf{g_1}^{3} \mathsf{LF_{3,-1}} \left[\mathbf{m_{\tilde{u}}}^{\mathbf{p}} \right] - \frac{1}{4} \mathbf{g_1}^{3} \mathsf{LF_{2,0}} \left[\mathbf{m_{\tilde{u}}} \right] + \frac{1}{6} \mathbf{g_1}^{3} \mathsf{LF_{3,-1}} \left[\mathbf{m_{\tilde{u}}} \right] - \frac{1}{3} \mathbf{g_1}^{3} \mathsf{LF_{3,-1}} \left[\widetilde{\mu} \right] \right)$