

eu i1i2i3i4 →

$$\begin{aligned}
& \frac{1}{16\pi^2} \left(\frac{1}{108} \frac{1}{m_e^2} (7 g_1^2 c_Y^2 \overline{y_u}^{pi3} y_u^{pi4} \delta_{i1i2} + 2 s_Y^2 \overline{y_e}^{pi1} y_e^{pi2} (27 c_Y^2 \overline{y_u}^{ri3} y_u^{ri4} + 5 g_1^2 \delta_{i3i4})) - \right. \\
& \frac{8}{81} \sum_p g_1^4 \text{LF}_{3,0}[m_d^p] \delta_{i1i2} \delta_{i3i4} + \frac{5}{27} \sum_p g_1^4 \text{LF}_{4,-1}[m_d^p] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{32}{405} \sum_p g_1^4 \text{LF}_{5,-2}[m_d^p] \delta_{i1i2} \delta_{i3i4} - \frac{8}{27} \sum_p g_1^4 \text{LF}_{3,0}[m_e^p] \delta_{i1i2} \delta_{i3i4} + \\
& \frac{5}{9} \sum_p g_1^4 \text{LF}_{4,-1}[m_e^p] \delta_{i1i2} \delta_{i3i4} - \frac{32}{135} \sum_p g_1^4 \text{LF}_{5,-2}[m_e^p] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{4}{27} \sum_p g_1^4 \text{LF}_{3,0}[m_l^p] \delta_{i1i2} \delta_{i3i4} + \frac{5}{18} \sum_p g_1^4 \text{LF}_{4,-1}[m_l^p] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{16}{135} \sum_p g_1^4 \text{LF}_{5,-2}[m_l^p] \delta_{i1i2} \delta_{i3i4} - \frac{4}{81} \sum_p g_1^4 \text{LF}_{3,0}[m_q^p] \delta_{i1i2} \delta_{i3i4} + \\
& \frac{5}{54} \sum_p g_1^4 \text{LF}_{4,-1}[m_q^p] \delta_{i1i2} \delta_{i3i4} - \frac{16}{405} \sum_p g_1^4 \text{LF}_{5,-2}[m_q^p] \delta_{i1i2} \delta_{i3i4} - \frac{32}{81} \sum_p g_1^4 \text{LF}_{3,0}[m_u^p] \\
& \delta_{i1i2} \delta_{i3i4} + \frac{20}{27} \sum_p g_1^4 \text{LF}_{4,-1}[m_u^p] \delta_{i1i2} \delta_{i3i4} - \frac{128}{405} \sum_p g_1^4 \text{LF}_{5,-2}[m_u^p] \delta_{i1i2} \delta_{i3i4} + \\
& \frac{1}{9} (g_1^2 c_Y^2 \overline{y_u}^{pi3} y_u^{pi4} \delta_{i1i2} + s_Y^2 \overline{y_e}^{pi1} y_e^{pi2} (9 c_Y^2 \overline{y_u}^{ri3} y_u^{ri4} + 2 g_1^2 \delta_{i3i4})) \text{LF}_{1,2}[m_\Phi] + \\
& \frac{1}{18} (3 g_1^2 c_Y^2 \overline{y_u}^{pi3} y_u^{pi4} \delta_{i1i2} + s_Y^2 \overline{y_e}^{pi1} y_e^{pi2} (-9 c_Y^2 \overline{y_u}^{ri3} y_u^{ri4} + 2 g_1^2 \delta_{i3i4})) \text{LF}_{2,1}[m_\Phi] - \\
& \frac{1}{54} g_1^2 (6 s_Y^2 \overline{y_e}^{pi1} y_e^{pi2} \delta_{i3i4} + (9 c_Y^2 \overline{y_u}^{pi3} y_u^{pi4} + 8 g_1^2 \delta_{i3i4}) \delta_{i1i2}) \text{LF}_{3,0}[m_\Phi] + \\
& \frac{5}{18} g_1^4 \text{LF}_{4,-1}[m_\Phi] \delta_{i1i2} \delta_{i3i4} - \frac{16}{135} g_1^4 \text{LF}_{5,-2}[m_\Phi] \delta_{i1i2} \delta_{i3i4} - \frac{4}{27} g_1^4 \text{LF}_{3,0}[\tilde{\mu}] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{2}{9} g_1^4 \text{LF}_{4,-1}[\tilde{\mu}] \delta_{i1i2} \delta_{i3i4} + \frac{32}{135} g_1^4 \text{LF}_{5,-2}[\tilde{\mu}] \delta_{i1i2} \delta_{i3i4} - \frac{2}{9} g_1^4 \text{LF}_{2,1,0}[m_1, m_e^{i2}] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{2}{9} g_1^4 \text{LF}_{2,2,-1}[m_1, m_e^{i2}] \delta_{i1i2} \delta_{i3i4} + \frac{4}{9} g_1^4 \text{LF}_{3,1,-1}[m_1, m_e^{i2}] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{2}{9} g_1^4 \text{LF}_{4,1,-2}[m_1, m_e^{i2}] \delta_{i1i2} \delta_{i3i4} - \frac{8}{81} g_1^4 \text{LF}_{2,1,0}[m_1, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{8}{81} g_1^4 \text{LF}_{2,2,-1}[m_1, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} + \frac{16}{81} g_1^4 \text{LF}_{3,1,-1}[m_1, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{8}{81} g_1^4 \text{LF}_{4,1,-2}[m_1, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} - \frac{8}{27} g_1^2 g_3^2 \text{LF}_{2,1,0}[m_3, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{8}{27} g_1^2 g_3^2 \text{LF}_{2,2,-1}[m_3, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} + \frac{16}{27} g_1^2 g_3^2 \text{LF}_{3,1,-1}[m_3, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{8}{27} g_1^2 g_3^2 \text{LF}_{4,1,-2}[m_3, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} + \frac{4}{9} g_1^4 \text{LF}_{2,1,0}[m_e^{i2}, m_1] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{2}{9} g_1^4 \text{LF}_{3,1,-1}[m_e^{i2}, m_1] \delta_{i1i2} \delta_{i3i4} + \frac{2}{9} g_1^2 \overline{y_e}^{pi1} y_e^{pi2} \text{LF}_{2,1,0}[m_l^p, \tilde{\mu}] \delta_{i3i4} - \\
& \frac{1}{9} g_1^2 \overline{y_e}^{pi1} y_e^{pi2} \text{LF}_{2,2,-1}[m_l^p, \tilde{\mu}] \delta_{i3i4} - \frac{1}{9} g_1^2 \overline{y_e}^{pi1} y_e^{pi2} \text{LF}_{3,1,-1}[m_l^p, \tilde{\mu}] \delta_{i3i4} + \\
& \frac{1}{9} g_1^2 \overline{y_u}^{pi3} y_u^{pi4} \text{LF}_{2,1,0}[m_q^p, \tilde{\mu}] \delta_{i1i2} - \frac{1}{18} g_1^2 \overline{y_u}^{pi3} y_u^{pi4} \text{LF}_{2,2,-1}[m_q^p, \tilde{\mu}] \delta_{i1i2} - \\
& \frac{1}{18} g_1^2 \overline{y_u}^{pi3} y_u^{pi4} \text{LF}_{3,1,-1}[m_q^p, \tilde{\mu}] \delta_{i1i2} + \frac{16}{81} g_1^4 \text{LF}_{2,1,0}[m_u^{i4}, m_1] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{8}{81} g_1^4 \text{LF}_{3,1,-1}[m_u^{i4}, m_1] \delta_{i1i2} \delta_{i3i4} + \frac{16}{27} g_1^2 g_3^2 \text{LF}_{2,1,0}[m_u^{i4}, m_3] \delta_{i1i2} \delta_{i3i4} - \\
& \frac{8}{27} g_1^2 g_3^2 \text{LF}_{3,1,-1}[m_u^{i4}, m_3] \delta_{i1i2} \delta_{i3i4} - \frac{1}{9} g_1^2 \overline{y_e}^{pi1} y_e^{pi2} \text{LF}_{2,1,0}[\tilde{\mu}, m_l^p] \delta_{i3i4} + \\
& \frac{5}{9} g_1^2 \overline{y_e}^{pi1} y_e^{pi2} \text{LF}_{3,1,-1}[\tilde{\mu}, m_l^p] \delta_{i3i4} - \frac{2}{9} g_1^2 \overline{y_e}^{pi1} y_e^{pi2} \text{LF}_{4,1,-2}[\tilde{\mu}, m_l^p] \delta_{i3i4} - \\
& \frac{1}{18} g_1^2 \overline{y_u}^{pi3} y_u^{pi4} \text{LF}_{2,1,0}[\tilde{\mu}, m_q^p] \delta_{i1i2} + \frac{11}{18} g_1^2 \overline{y_u}^{pi3} y_u^{pi4} \text{LF}_{3,1,-1}[\tilde{\mu}, m_q^p] \delta_{i1i2} - \\
& \frac{2}{9} g_1^2 \overline{y_u}^{pi3} y_u^{pi4} \text{LF}_{4,1,-2}[\tilde{\mu}, m_q^p] \delta_{i1i2} + \frac{4}{9} g_1^4 \text{LF}_{2,1,1,-1}[m_1, m_e^{i2}, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} + \\
& \left. \frac{8}{9} g_1^4 m_1^2 \text{LF}_{2,1,1,0}[m_1, m_e^{i2}, m_u^{i4}] \delta_{i1i2} \delta_{i3i4} + \tilde{\mu}^2 \overline{y_e}^{pi1} y_e^{pi2} \overline{y_u}^{ri3} y_u^{ri4} \text{LF}_{2,1,1,0}[\tilde{\mu}, m_l^p, m_q^r] \right)
\end{aligned}$$