

$$g_1 \rightarrow \bar{g}_1$$

$$g_2 \rightarrow \bar{g}_2$$

$$g_3 \rightarrow \bar{g}_3$$

$$M_H^2 \rightarrow m_H^2$$

$$Y_d^{i1-i2-} \rightarrow c_\gamma y_d^{i1i2}$$

$$Y_e^{i1-i2-} \rightarrow c_\gamma y_e^{i1i2}$$

$$Y_u^{i1-i2-} \rightarrow s_\gamma y_u^{i1i2}$$

$$\lambda \rightarrow \frac{1}{4} c_{2\gamma}^2 (g_1^2 + g_2^2)$$

$$C_{dH}^{i1-i2-} \rightarrow \frac{1}{8} s_{4\gamma} s_\gamma \frac{1}{m_\Phi^2} y_d^{i1i2} (g_1^2 + g_2^2)$$

$$C_{eH}^{i1-i2-} \rightarrow \frac{1}{8} s_{4\gamma} s_\gamma \frac{1}{m_\Phi^2} y_e^{i1i2} (g_1^2 + g_2^2)$$

$$C_H \rightarrow \frac{1}{64} \frac{1}{m_\Phi^2} s_{4\gamma}^2 (g_1^2 + g_2^2)^2$$

$$C_{le}^{i1-i2-i3-i4-} \rightarrow -\frac{1}{2} \frac{1}{m_\Phi^2} s_\gamma^2 \overline{y_e}^{i2i3} y_e^{i1i4}$$

$$C_{ledq}^{i1-i2-i3-i4-} \rightarrow \frac{1}{m_\Phi^2} s_\gamma^2 \overline{y_d}^{i4i3} y_e^{i1i2}$$

$$C_{lequ}^{(1) i1-i2-i3-i4-} \rightarrow s_\gamma c_\gamma \frac{1}{m_\Phi^2} y_e^{i1i2} y_u^{i3i4}$$

$$C_{qd}^{(1) i1-i2-i3-i4-} \rightarrow -\frac{1}{6} \frac{1}{m_\Phi^2} s_\gamma^2 \overline{y_d}^{i2i3} y_d^{i1i4}$$

$$C_{qd}^{(8) i1-i2-i3-i4-} \rightarrow -\frac{1}{m_\Phi^2} s_\gamma^2 \overline{y_d}^{i2i3} y_d^{i1i4}$$

$$C_{qu}^{(1) i1-i2-i3-i4-} \rightarrow -\frac{1}{6} \frac{1}{m_\Phi^2} c_\gamma^2 \overline{y_u}^{i2i3} y_u^{i1i4}$$

$$C_{qu}^{(8) i1-i2-i3-i4-} \rightarrow -\frac{1}{m_\Phi^2} c_\gamma^2 \overline{y_u}^{i2i3} y_u^{i1i4}$$

$$C_{quqd}^{(1) i1-i2-i3-i4-} \rightarrow -s_\gamma c_\gamma \frac{1}{m_\Phi^2} y_d^{i3i4} y_u^{i1i2}$$

$$C_{uH}^{i1-i2-} \rightarrow -\frac{1}{8} s_{4\gamma} c_\gamma \frac{1}{m_\Phi^2} y_u^{i1i2} (g_1^2 + g_2^2)$$

$$C_{H^2} \rightarrow -m_H^2$$