• Mass matrix elements:

$$R_{h1} = s_{\beta\alpha}, \qquad R_{h2} = c_{\beta\alpha}, \qquad R_{h3} = 0,$$
 $R_{H1} = c_{\beta\alpha}, \qquad R_{H2} = -s_{\beta\alpha}, \qquad R_{H3} = 0,$ $R_{A1} = 0, \qquad R_{A2} = 0, \qquad R_{A3} = 1,$

• Higgs-fermion couplings:

$$u d, l$$

$$h^{0}: s_{\beta\alpha} + \frac{c_{\beta\alpha}}{t_{\beta}} s_{\beta\alpha} - c_{\beta\alpha}t_{\beta}$$

$$H^{0}: c_{\beta\alpha} - \frac{s_{\beta\alpha}}{t_{\beta}} c_{\beta\alpha} + s_{\beta\alpha}t_{\beta}$$

$$A^{0}: \frac{-i}{t_{\beta}} - it_{\beta}$$