Erratum



## **Erratum to: Decoupling of the right-handed neutrino contribution to the Higgs mass in supersymmetric models**

## Patrick Drapera<sup>a</sup>, Howard E. Haber

Santa Cruz Institute for Particle Physics, University of California, Santa Cruz, CA 95064, USA

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The published version of this paper contained three typographical errors.

• In Eq. (2.11), terms  $-A_d/\sqrt{2}v_d$  and  $-A_u/\sqrt{2}v_u$  were omitted in the expressions for  $m_1^2$  and  $m_2^2$  respectively. The corrected formulae read:

$$\begin{split} m_1^2 &= \left(\frac{v_u}{v}\right)^2 m_A^2 + \left[\left(\frac{v_u}{v}\right)^4 - 1\right] \frac{A_d}{\sqrt{2}v_d} \tag{2.11} \\ &+ \left(\frac{v_d v_u}{v^2}\right)^2 \frac{A_u}{\sqrt{2}v_u} + \frac{G^2}{4}(v_u^2 - v_d^2), \\ m_2^2 &= \left(\frac{v_d}{v}\right)^2 m_A^2 + \left(\frac{v_u v_d}{v^2}\right)^2 \frac{A_d}{\sqrt{2}v_d} \\ &+ \left[\left(\frac{v_d}{v}\right)^4 - 1\right] \frac{A_u}{\sqrt{2}v_u} - \frac{G^2}{4}(v_u^2 - v_d^2). \end{split}$$

In Eq. (2.12) a factor of s<sup>4</sup><sub>β</sub> should be changed to c<sup>4</sup><sub>β</sub> in the 22 element of the matrix. The aforementioned errors in Eq. (2.11) also propagated to this formula. The corrected matrix reads:

• In Eq. (2.15) the signs in front of the counterterms were flipped. The corrected substitutions are:

$$v_{u} \to \mathcal{Z}_{H_{u}}^{-1/2} v_{u} = v_{u} (1 - \frac{1}{2} \delta \mathcal{Z}_{H_{u}}), \qquad (2.15)$$
$$v_{d} \to \mathcal{Z}_{H_{d}}^{-1/2} v_{d} = v_{d} (1 - \frac{1}{2} \delta \mathcal{Z}_{H_{d}}).$$

The subsequent equations in Sect. 2 of the published paper were derived using the corrected versions of Eqs. (2.11), (2.12) and (2.15) exhibited above. Hence, the typographical errors noted above do not affect the remainder of the published paper.

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$$\mathcal{M}_{e}^{2} = \begin{pmatrix} m_{A}^{2}s_{\beta}^{2} + m_{Z}^{2}c_{\beta}^{2} + \frac{A_{d}}{\sqrt{2}v_{d}}(s_{\beta}^{4} - 1) + \frac{A_{u}}{\sqrt{2}v_{u}}s_{\beta}^{2}c_{\beta}^{2} & -(m_{A}^{2} + m_{Z}^{2})s_{\beta}c_{\beta} - \frac{A_{u}}{\sqrt{2}v_{u}}c_{\beta}^{3}s_{\beta} - \frac{A_{d}}{\sqrt{2}v_{d}}s_{\beta}^{3}c_{\beta} \\ -(m_{A}^{2} + m_{Z}^{2})s_{\beta}c_{\beta} - \frac{A_{u}}{\sqrt{2}v_{u}}c_{\beta}^{3}s_{\beta} - \frac{A_{d}}{\sqrt{2}v_{d}}s_{\beta}^{3}c_{\beta} & m_{A}^{2}c_{\beta}^{2} + m_{Z}^{2}s_{\beta}^{2} + \frac{A_{d}}{\sqrt{2}v_{d}}s_{\beta}^{2}c_{\beta}^{2} + \frac{A_{u}}{\sqrt{2}v_{u}}(c_{\beta}^{4} - 1) \end{pmatrix}.$$
(2.12)

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<sup>&</sup>lt;sup>a</sup>e-mail: pidraper@ucsc.edu (corresponding author)