

Erratum: Note on the field theory of neutrino mixing
[Phys. Rev. D 59, 113003 (1999)]

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 (Published 1 October 1999)

[S0556-2821(99)08919-5]

PACS number(s): 14.60.Pq, 99.10.+g

(1) Equation (B1) should be replaced by

$$\mathcal{L}(x) = - \sum_{\rho} [\bar{\nu}_{\rho L}(x) \not{\partial} \nu_{\rho L}(x) + \bar{\nu}'_{\rho R}(x) \not{\partial} \nu'_{\rho R}(x)] - \left((\bar{\nu}_{eL}(x) \bar{\nu}_{\mu L}(x) \bar{\nu}_{\tau L}(x)) M' \begin{pmatrix} \nu'_{eR}(x) \\ \nu'_{\mu R}(x) \\ \nu'_{\tau R}(x) \end{pmatrix} + \text{H.c.} \right) + \mathcal{L}'_{int}(x). \quad (\text{B1})$$

(2) Equation (B2) should be replaced by

$$\begin{pmatrix} \nu_{eL}(x) \\ \nu_{\mu L}(x) \\ \nu_{\tau L}(x) \end{pmatrix} = V_L \begin{pmatrix} \nu_{1L}(x) \\ \nu_{2L}(x) \\ \nu_{3L}(x) \end{pmatrix}, \quad \begin{pmatrix} \nu'_{eR}(x) \\ \nu'_{\mu R}(x) \\ \nu'_{\tau R}(x) \end{pmatrix} = V_R \begin{pmatrix} \nu_{1R}(x) \\ \nu_{2R}(x) \\ \nu_{3R}(x) \end{pmatrix}. \quad (\text{B2})$$

(3) The following sentence should be inserted under Eq. (B3): ‘‘If we want to obtain directly the positive eigenvalues for M' with $\det(M') \neq 0$, we may proceed as follows.’’

(4) Equation (B7) should be replaced by

$$\nu_{\sigma L/R}(x) := \sum_j v_{\sigma j} \nu_{jL/R}(x), \quad V = [v_{\sigma j}]. \quad (\text{B7})$$

(5) Equation (B8) should be replaced by

$$\begin{aligned} \mathcal{L}(x) &= - \sum_{\rho} [\bar{\nu}_{\rho L}(x) \not{\partial} \nu_{\rho L}(x) + \bar{\nu}_{\rho R}(x) \not{\partial} \nu_{\rho R}(x)] - \left((\bar{\nu}_{eL}(x) \bar{\nu}_{\mu L}(x) \bar{\nu}_{\tau L}(x)) M \begin{pmatrix} \nu_{eR}(x) \\ \nu_{\mu R}(x) \\ \nu_{\tau R}(x) \end{pmatrix} + \text{H.c.} \right) + \mathcal{L}_{int}(x) \\ &= - (\bar{\nu}_e(x) \bar{\nu}_{\mu}(x) \bar{\nu}_{\tau}(x)) (\not{\partial} + M) \begin{pmatrix} \nu_e(x) \\ \nu_{\mu}(x) \\ \nu_{\tau}(x) \end{pmatrix} + \mathcal{L}_{int}(x). \end{aligned} \quad (\text{B8})$$