Erratum: Rephasing invariance and neutrino mixing

S.H. Chiu^a and T.K. Kuo^b

^a*Physics Group, CGE, Chang University,
Kwei-Shan 333, Taiwan*

^b*Department of Physics, Purdue University,
West Lafayette, IN 47907, U.S.A.*

E-mail: schiu@mail.cgu.edu.tw, tkkuo@purdue.edu

ERRATUM TO: [JHEP11\(2010\)080](#)

ABSTRACT: A rephasing invariant parametrization is introduced for three flavor neutrino mixing. For neutrino propagation in matter, these parameters are shown to obey evolution equations as functions of the induced neutrino mass. These equations are found to preserve (approximately) some characteristic features of the mixing matrix, resulting in solutions which exhibit striking patterns as the induced mass varies. The approximate solutions are compared to numerical integrations and found to be quite accurate.

The following changes should be made.

- Ref. [2] of the original paper should be replaced with “ [2] T. K. Kuo and Tae-Hun Lee, *Rephasing invariant parametrization of flavor mixing matrices*, *Phys. Rev. D* **71** (2005) 093011 [[hep-ph/0504062](#)] ”.
- Eq. (4.21) of the original paper should be corrected as “ $(\delta A)_h = (1 - q_h^2/p_h^2)^{1/2}(\Delta_0/p_h) \cong 2\sqrt{Z_0}\Delta_0 \ll \Delta_0$ ”.
- In page 10 of the original paper, the expression for $(\delta A)_h$ in the 8th line from the bottom should be corrected as “ $(\delta A)_h \cong 2|V_{13}|\Delta_0 \ll \Delta_0$ ”.