Erratum: Nuclear effects in neutrino and antineutrino charged-current quasielastic scattering at MINERvA kinematics [Phys. Rev. D 89, 093002 (2014)]

G. D. Megias, M. V. Ivanov, R. González-Jiménez, J. A. Caballero, M. B. Barbaro, T. W. Donnelly, and J. M. Udías (Received 21 January 2015; published 11 February 2015)

DOI: 10.1103/PhysRevD.91.039903

PACS numbers: 25.30.Pt, 13.15.+g, 24.10.Jv, 99.10.Cd

The aim of this Erratum is to update the lower panel of Fig. 4 in our original article, which corresponds to the MiniBooNE antineutrino differential cross section $d\sigma/dQ_{QE}^2$ [1]. In the published Fig. 4 (lower panel), we found that the data set of the MiniBooNE antineutrino flux was not read properly in the SuSA and RFG calculations. The employment of the proper data set results in a cross section around 10%–15% larger (Fig. 1) for these theoretical models, but still below the experimental data and, consequently, all the discussions and conclusions in the original article remain valid.



FIG. 1 (color online). Flux-folded CCQE and $\bar{\nu}_{\mu} - {}^{12}C$ (lower panel of the published Fig. 4) scattering cross section per target nucleon as a function of Q_{QE}^2 and evaluated in the SuSA, RMF, and EMA models and compared with MiniBooNE data [1]. The RFG model is shown for two values of the axial mass (see original paper for more details).

[1] A. A. Aguilar-Arevalo et al. (MiniBooNE Collaboration), Phys. Rev. D 88, 032001 (2013).