

Abstract Submitted
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Electron-neutrino charged-current quasi-elastic scattering in MINERvA JEREMY WOLCOTT, University of Rochester, MINERVA COLLABORATION — The electron-neutrino charged-current quasi-elastic (CCQE) cross-section on nuclei is an important input parameter to appearance-type neutrino oscillation experiments. Current experiments typically work from the muon neutrino CCQE cross-section and apply corrections from theoretical arguments to obtain a prediction for the electron neutrino CCQE cross-section, but to date there has been no precise experimental verification of these estimates at an energy scale appropriate to such experiments. We present the current status of a direct measurement of the electron neutrino CCQE differential cross-section as a function of the squared four-momentum transfer to the nucleus, Q^2 , in MINERvA. This talk will discuss event selection, background constraints, and the flux prediction used in the calculation.

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