Contribution ID: **279**   Type: **Poster accelerator**

Comparison of νμ-Ar multiplicity distributions observed by MicroBooNE to GENIE predictions

We measure a large set of observables in inclusive charged current muon neutrino scattering on argon with the MicroBooNE liquid argon time projection chamber operating at Fermilab. We evaluate three neutrino interaction models based on the widely used GENIE event generator using these observables. The measurement uses a data set consisting of neutrino interactions with a final state muon candidate fully contained within the MicroBooNE detector. These data were collected in 2016 with the Fermilab Booster Neutrino Beam, which has an average neutrino energy of 800 MeV, using an exposure corresponding to 5e19 protons-on-target. The analysis employs fully automatic event selection and charged particle track reconstruction and uses a data-driven technique to separate neutrino interactions from cosmic ray background events.

Authorship annotation

for the MicroBooNE collaboration

Session and Location

Wednesday Session, Poster Wall #69 (Auditorium Gallery Right)

Poster included in proceedings:

yes

Primary author: Ms RAFIQUE, Aleena (Kansas State University)

Presenter: Ms RAFIQUE, Aleena (Kansas State University)

Track Classification: Poster (participating in poster prize competition)