Contribution ID: **20** Type: **Oral Presentation**

Evaluating the Performance of Multiple Coulomb Scattering Based Momentum Reconstruction with MicroBooNE Data

Monday, 18 June 2018 09:45 (15 minutes)

MicroBooNE is a short baseline neutrino oscillation experiment based at Fermilab that uses Liquid Argon Time Projection Chamber (LArTPC) technology primarily to investigate the excess of low energy events observed by MiniBooNE study neutrino-argon cross-sections, and perform LArTPC R&D for future experiments, such as DUNE. Multiple Coulomb scattering (MCS) is the only way to determine the momentum of exiting muons in the MicroBooNE detector, essential for reconstructing the neutrino in energetic events. This talk will discuss the status and performance of using multiple Coulomb scattering on exiting tracks in MicroBooNE data.

Primary author: ABRATENKO, Polina (University of Michigan)

Presenter: ABRATENKO, Polina (University of Michigan)

Session Classification: Short Baseline Neutrino Program