

Measurements of pion production in eA with the CLAS detector

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Preliminary results on semi-inclusive charged pion production in eA collisions at $E_{\text{beam}}=5 \text{ GeV}/c^2$ are presented. These data are thought to be useful for tuning the hadronic production models used in extracting results from current and next-generation neutrino oscillation experiments. The data were collected using the CLAS detector, which is a multipurpose, large acceptance, magnetic spectrometer located in Hall B at the Thomas Jefferson National Accelerator Facility. Distributions (integrated and differential) in W , Q^2 , pion momentum, and pion angle are shown for data produced using Deuterium, carbon, and iron targets, including radiative corrections. Preliminary comparisons with data simulated using the GENIE generator are made.

Summary

Preliminary results on semi-inclusive charged pion production in eA on deuterium, carbon, and iron are shown and compared to the MC prediction of GENIE.

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