

Abstract Submitted
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Fiducial Cuts for the CLAS G3 Data Set¹ ELLIOT IMLER, RICHARD BONVENTRE, CHRISTIAN SHULTZ, MICHAEL VINEYARD, Union College, CLAS COLLABORATION — Fiducial cuts have been determined for protons and charged pions produced by photons with energies between 0.3 and 1.5 GeV incident on Helium targets in the CEBAF Large Acceptance Spectrometer (CLAS) at the Thomas Jefferson National Accelerator Facility. This work is part of a systematic study of neutral meson photoproduction from the proton and light nuclear targets to investigate nuclear medium modifications of nucleon resonances and the meson-nucleon interaction. The fiducial cuts are performed to eliminate data from regions of the detector with non-uniform acceptance. The cuts were determined by fitting a trapezoidal function to the ϕ spectra binned in scattering angle and momentum for each particle type. The ϕ position of the corners of the trapezoids were then fitted as a function of scattering angle, and the parameters of these fits were fitted as a function of momentum to obtain the functions that are applied to the data to produce the cuts. The procedure will be described and the results will be presented.

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Elliot Imler
Union College

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