

Abstract Submitted  
for the DNP07 Meeting of  
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**Fiducial Volumes for Photons Detected in the Electromagnetic Calorimeters of the CLAS Detector at Jefferson Lab**<sup>1</sup> CHRISTIAN SHULTZ, ELLIOT IMLER, MIKE VINEYARD, Union College, CLAS COLLABORATION — Fiducial volumes have been determined for photons detected in the electromagnetic calorimeters of 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 over an incident photon energy range of 0.5 - 1.5 GeV to investigate nuclear medium modifications of nucleon resonances and the meson-nucleon interaction. In this analysis the neutral mesons are reconstructed from their two-photon decay. The fiducial volumes define regions of the calorimeters with full photon detection efficiency. The volumes were determined by examining the photon hit distributions along the different scintillator planes in the sampling calorimeters. The procedure will be described and the results will be presented.

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