Fiducial Cuts on CLAS for the E5 Data Set KRISTEN GREEN-
HOLT, University of Richmond, Virginia, CLAS DETECTOR COLLABORATION
— The Thomas Jefferson National Accelerator Facility, in Newport News, Virginia,
is home to CLAS (CEBAF Large Acceptance Spectrometer) which observes the
scattering of an electron beam on a nuclear target. The acceptance of the detector
is the ratio between the events we expect to observe in an ideal detector and the
data that we actually measure with CLAS. In order to analyze data from regions
of well-understood acceptance, we generated electron and proton fiducial cuts on
CLAS, fitting a trapezoidal function to the azimuthal dependence in a particular
scattering angle bin. Previously, we analyzed the 2.56-GeV, normal torus polarity
data from the E5 run period. Our current analysis extends the method to the 2.56-
GeV, reversed-torus polarity and the 4.23-GeV normal- polarity data sets of the E5
running period. We will compare the effects of fiducials cuts under these different
running conditions. These results are consistent with our expectations, validating
the use of fiducial cuts to isolate stable efficiency.

G.P. Gilfoyle
University of Richmond, Virginia