

Abstract Submitted
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Comparison between Simulations and Data for Neutral Meson Photoproduction on the Proton¹ FATIMA MAHMOOD, MICHAEL VINEYARD, Union College, CLAS COLLABORATION — The photoproduction of π^0 and η mesons from the proton over an incident photon energy range of 0.5-2.3 GeV is being studied using data from the CLAS detector in Hall B at Jefferson Lab. 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 π^0 and η mesons are reconstructed from their two-photon decay and from the $\gamma + p \rightarrow p + x$ missing mass. Monte Carlo simulations are being performed to determine the acceptance of the CLAS detector. The physics distributions generated from the simulations are being compared to those obtained from the data to tune the simulations. The analysis will be described and comparisons between the data and simulations will be presented.

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