

Abstract Submitted
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π^+ photoproduction on the proton from 0.675 to 2.875 GeV¹
BARRY RITCHIE, Arizona State University, CLAS COLLABORATION — Differential cross sections for the reaction $\gamma + p \rightarrow n + \pi^+$ have been measured with the CEBAF Large Acceptance Spectrometer (CLAS), a tagged photon beam with energies from 0.675 to 2.875 GeV, and a cryogenic hydrogen target. The reaction channel was isolated by detecting the photoproduced pion and identifying the recoil neutron through the missing mass technique, assuming $\gamma + p \rightarrow \pi^+ + X$. Photon energy bin widths were 50 MeV, and absolute normalization uncertainties for these differential cross sections were less than 5% at all energies studied. These cross sections complement and extend the existing data for the process. Data from this experiment were included in a SAID fit and compared with MAID and previous experiments. The impact of this new data set will be discussed.

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