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Polarization Observable E in the $p(\gamma, \pi^+)n$ Reaction[1] STEFFEN STRAUCH, University of South Carolina, CLAS COLLABORATION — The main objective of the FROST experiment at Jefferson Lab is the study of baryon resonances. The polarization observable E for the reaction $\vec{\gamma}\vec{p} \to \pi^+ n$ has been measured as part of this program. A circularly polarized tagged photon beam with energies from 0.35 to 2.35 GeV was incident on a longitudinally polarized frozen-spin butanol target. The final-state pions were detected with the CEBAF Large Acceptance Spectrometer. The extracted polarization data agree fairly well with present SAID and MAID partial-wave analyses at low photon energies. In most of the covered energy range, however, significant deviations are observed. These discrepancies underline the crucial importance of polarization observables to further constrain these analyses.

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