

Abstract Submitted
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Preliminary Results of T and F Asymmetries for π^0 Photoproduction from the Proton¹ ROSS TUCKER, Arizona State University, CLAS COLLABORATION — Polarization observables are an important tool for understanding and clarifying baryon resonance spectra. Recently, experiments were conducted at Jefferson Lab using a polarized photon beam incident on a polarized frozen spin target (FROST). We present preliminary data of the T and F asymmetries for π^0 meson photoproduction from the proton, along with comparisons to theoretical predictions. The data used in the present analysis were taken during the second running period of FROST using the CLAS detector at Jefferson Lab, which utilized transversely polarized protons in a butanol target and an incident tagged photon energy between 0.62 and 2.93 GeV. The T asymmetry is the observable related to transverse target polarization and the world database currently contains 398 such measurements. The F asymmetry is a double-polarization observable that requires circular beam polarization in addition to transverse target polarization. There have been no published measurements of F .

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