

Abstract Submitted  
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**Double-polarization E and G observables in  $\eta$  photo-production on the CLAS Frozen Spin Target**<sup>1</sup> IGOR SENDEROVICH, Arizona State University, CLAS COLLABORATION — Exclusive  $\eta$  photo-production is an important tool in baryon spectroscopy, allowing isolation of  $N^*$  ( $I=1/2$ ) resonances. Furthermore, it has long been recognized that due to significant overlapping of resonances in the baryon spectrum, differential cross-sections are not enough; measuring polarization observables is vital. Extensive data have been collected at Jefferson Lab in Hall B with circularly and linearly polarized tagged photon beams incident on longitudinally polarized protons provided by the Frozen Spin Target (FROST). The presentation will cover analysis and preliminary results of double-polarization observables E and G in  $\eta$  photo-production - data entirely missing from the world database.

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