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Photoproduction of ω mesons off bounded proton with the CLAS detector at Jlab[1] OLGA CORTES, Idaho State University, PHILIP COLE, Lamar University, CLAS COLLABORATION — QCD-inspired models have been developed to explain the hadronic spectrum in terms of the underlying QCD degrees of freedom. And while there have been many successes in delineating the significant features of the overall spectrum, many of the resonant states that have been predicted by these models have not yet been found experimentally. Because of the high number of excited states of the nucleon, all of which have large widths causing the resonances to overlap, we need to study the kinematic evolution of the polarization observables for obtaining a "complete measurement" towards extracting the pertinent helicity amplitudes. In our work, we are focusing on the photoproduction of ω mesons off the bound proton which provides information about N^* resonances as ω is an isospin filter. In this talk, we present preliminary results for the quasi-free $\vec{\gamma}d \to \omega p(n)$ photon beam asymmetry polarization observable. The data were taken with the CLAS detector in Hall B at the Thomas Jefferson National Accelerator Laboratory (Jlab). The experiment provided a high-quality beam of linearly-polarized photons in the energy range from 1.1 to 2.3 GeV.

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