Abstract Submitted
for the APR10 Meeting of
The American Physical Society

ϕ(1020) Photoproduction on the Neutron[1] ANNA MICHERDZINSKA, BARRY BERMAN, The George Washington University, CLAS COLLABORATION — The mechanism of ϕ photoproduction on the nucleon is not yet well understood. In order to differentiate between the various mechanisms proposed for ϕ photoproduction, data for both differential cross sections and spin observables are needed. All existing experimental data come from ϕ photoproduction on the proton, and there is only one published result currently available using a linearly polarized photon beam. There are no experimental results at all for ϕ photoproduction on the neutron. Our high-statistics and large-kinematic-coverage g13 experiment, using the CLAS at Jefferson Lab, where both linearly and circularly polarized photons were incident on a deuterium target, can provide such data. We are analyzing these data to extract angular distributions for the $\gamma + n \to K^+K^- + n$ reaction channel. An update on the analysis of these data will be presented.

[1]Work is supported in part by the U.S. Department of Energy.

Anna Micherdzinska
The George Washington University

Date submitted: 26 Oct 2009 Electronic form version 1.4