Abstract Submitted for the DNP13 Meeting of The American Physical Society

Deeply Virtual Compton Scattering on the Proton NICHOLAS HIRLINGER SAYLOR, Rensselaer Polytechnic Institute, IPN Orsay, JLAB, CLAS COLLABORATION — DVCS on the proton was measured at Jefferson Lab with CLAS at Hall B with a polarized 5.88 GeV electron beam on an unpolarized hydrogen target. A preliminary measurement of unpolarized and polarized cross sections was made over wide kinematics, from 1 GeV² < Q^2 < 5 GeV², 0.1 < x_B < 0.6 and 0.1 GeV² < -t < 2 GeV². In the handbag model, this reaction is sensitive to the GPD H. The Compton form factor \mathcal{H}_{Im} , which is proportional to H, was extracted. In addition, we have made a comparison of measured cross sections with predictions from several different handbag based models. This measurement allows for further constraints to be placed on the various models, especially on H. Preliminary results for the extraction of the GPD H will be presented and discussed.

 ${\bf Nicholas\ Hirlinger\ Saylor}$ Jefferson Laboratory, The CLAS Collaboration

Date submitted: 01 Jul 2013 Electronic form version 1.4