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DVCS Cross Section Measurement on Proton at CLAS12[1] SANGBAEK LEE, Massachusetts Institute of Technology MIT — A progress report of the Deeply Virtual Compton Scattering (DVCS) cross-section measurement with a liquid hydrogen target at CLAS12 is presented. The proton DVCS data has been collected and analyzed since Jefferson Laboratory's recent upgrades of the CEBAF accelerator and the CLAS12 detector in Hall-B. The upgrades allow this scattering experiment to be equipped with a continuous wave electron beam of 10.6 GeV and a large acceptance detector with efficient particle tracking and identification that covers a wide range of kinematics. A proton DVCS process is defined as an exclusive electroproduction of a photon on the target proton in the Bjorken limit. This process has access to proton's Compton form factors (CFFs) and thus to proton's generalized parton distributions (GPDs). This work will provide a valuable data set of GPDs and the three-dimensional imaging of proton in the valence quark region.

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Sangbaek Lee
Massachusetts Institute of Technology MIT

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