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Measuring Deeply Virtual Compton Scattering on the Neutron with CLAS12 at Jefferson Lab KATHERYNE PRICE, Institut de Physique Nucleaire, Orsay, CLAS COLLABORATION COLLABORATION — A key step towards understanding nucleon structure in terms of generalized parton distributions (GPDs) is the measurement of deeply virtual Compton scattering on the neutron (nDVCS). This talk will report on a recently concluded experiment at Jefferson Lab, utilizing the upgraded 11 GeV CEBAF polarized electron beam, the CLAS12 detector, and a liquid deuterium target. Preparation of the raw data for analysis is currently ongoing. Preliminary beam-spin asymmetries for nDVCS ($ed \rightarrow e'n\gamma(p)$), extracted from approximately half of the total dataset, and a summary of detector performance and data quality will be presented. This beam-spin asymmetry measurement, when taken with complementary pDVCS measurements, gives us access to the flavor separation of relevant quark GPDs, only accessible in linear combinations within proton and neutron GPDs. In particular, the measurement of GPD E via nDVCS can be used to gather information on the quark total angular momentum and a more complete picture of the nucleon structure.

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