Nucleon structure studies via deeply virtual exclusive reactions at JLab

Deeply virtual exclusive reactions, and in particular deeply virtual Compton scattering (DVCS), are expected to give access to the generalized parton distributions (GPDs) in the nucleon. After summarizing the connection between DVCS and GPDs, the impact of recent results from dedicated DVCS experiments at Jefferson Lab will be discussed. Preliminary results on vector meson exclusive production will be shown as well. In 2007-2009, DVCS experiments will be performed at CLAS using unpolarized and polarized targets (both longitudinally and transversely polarized). The latter will yield observables sensitive the GPDs H_tilde and E. In conjunction with the 12 GeV upgrade of the CEBAF accelerator, large scale DVCS experiments have been already approved, both in CLAS12 (which will be described in some details) and in Hall A.