

Abstract Submitted
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Energy Dependent DVCS Cross Sections from JLab Hall A¹

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— In 2010, in experiments E07-007 (hydrogen target) and E08-025 (deuterium target), the Jefferson Lab Hall A collaboration measured the helicity-dependent and helicity-independent cross sections at fixed $x_B = 0.36$, at $Q^2 = 1.5, 1.75, \text{ and } 2.0$ GeV², and at two beam energies, 4.45 and 5.55 GeV. We detected the scattered electron in the Hall A High Resolution Spectrometer (HRS-L), and the coincidence photon in an upgraded 208 element PbF₂ calorimeter. Exclusivity is inferred by missing mass in the $(e, e'\gamma)X$ reaction. In the unpolarized cross sections, the $|\text{DVCS}|^2$ and $\Re[\text{DVCS}^\dagger\text{BH}]$ terms have different kinematic dependencies on the incident beam energy. I present preliminary results on the energy-dependence of the cross sections, and discuss their sensitivity to the Generalized Parton Distributions (GPDs).

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