

Beam Spin Asymmetry Measurements from Deeply Virtual Meson Production

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Study of deeply virtual exclusive meson production (DVMP) is being conducted in the E1-DVCS experiment with the CLAS detector at Jefferson Lab. The main motivation of the experiment is to characterize the partonic properties of the nucleon in the framework of generalized parton distributions (GPDs). Especially, the pseudo-scalar channels are sensitive to the polarized GPDs. The data were taken in the spring of 2005 using a 5.7 GeV longitudinally polarized electron beam and an un-polarized hydrogen target. We will report on the ongoing beam spin asymmetry (BSA) analysis for pseudo-scalar channels. We also discuss a proposed experiment that requires the use of 11 GeV electron beams, in anticipation of an energy upgrade to the existing Jefferson Lab accelerator.