

Measurement of coherent and incoherent DVCS at HERMES from nuclear targets

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For the first time, azimuthal beam-spin asymmetries have been measured in electroproduction of a hard exclusive photon on nuclei ranging from Deuterium to Xenon. The data were accumulated by the HERMES experiment at HERA/DESY in the years 1996-2004 by scattering the 27.6 GeV lepton beam off an internal gas target. The asymmetries of the coherent and incoherent processes for D, ^4He , N, Ne, Kr and Xe have been extracted and compared to the proton beam-spin asymmetry as a function of the Mandelstam variable t . The dependence on the atomic number A of the ratio of the beam-spin asymmetry on nuclei to that on the proton is evaluated and compared to GPD model predictions.

Primary author: GULER, Hayg (DESY)

Presenter: GULER, Hayg (DESY)

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