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Recent HERMES Results on DVCS from Proton and Nuclear Targets

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摘要 Spin structure is one of the fundamental subjects in the study of nucleon structure. Recently it is found that Generalized Parton Distributions(GPDs) are related to the total angular momentum carried by partons, which offers a possible solution to the spin puzzle in the first time. We get access to certain GPDs by looking at the azimuthal angle asymmetries attributed to the interference between Deeply Virtual Compton Scattering(DVCS) and Bethe Heiliter processes in HERMES experiment. By measuring the asymmetry with respect to transverse target polarization from proton target, a model dependent constraint on J_u vs J_d is obtained. Another worldwide unique channel is nuclear DVCS. The preliminary results on asymmetries with respect to beam spin and beam charge are reported.

关键词 [GPDs](#) [DVCS](#) [TTSA](#) [nuclear DVCS](#)

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