

Abstract Submitted
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Deeply Virtual Compton Scattering off Helium ERIC VOUTIER,
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Joseph Fourier, INP, CLAS COLLABORATION — Deeply Virtual Compton Scat-
tering (DVCS) is privileged tool to access the partonic structure of hadrons encoded
via the so-called Generalized Parton Distributions (GPDs). Similarly to the scatter-
ing of light by a material, DVCS provides information about the dynamics and the
spatial structure of hadrons. Whether the target nucleus remains intact or not after
the reaction, DVCS off a nuclear target allows to address the partonic structure of
the nucleus as well as the partonic structure of nucleons embedded in the nuclear
medium. Adding transverse degrees of freedom to conventional deep inelastic scat-
tering, these exclusive channels are expected to bring sensitive information about
the origin of the EMC effect. The eg6 experiment at the Jefferson Laboratory did
explore nuclear DVCS off ^4He . The experimental asymmetry of the DVCS reaction
with respect to the electron beam polarization was measured for the coherent and
incoherent channels with the CLAS detector, complemented with a small angle elec-
tromagnetic calorimeter and a radial time projection chamber. This talk reviews the
experimental methods and techniques of the eg6 run, and discusses the preliminary
results of DVXS measurements.

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