Unpolarized DVCS Formulations and the Observables Extraction

L. Calero, D. Keller
for the UVA Spin Physics Group

Abstract

Over the last 20 years there has been intense experimental activity dedicated to the measurement of observables to help build a 3D description of the nucleon. Generalized parton distributions (GPDs) describe complementary aspects of the structure of hadrons, providing qualitative and quantitative information about the partonic structure and dynamics such as orbital angular momentum. The formulation of the DVCS cross section is parametrized in terms of Compton Form Factors (CFFs) which are convolutions of GPDs with coefficient functions computed from perturbative QCD. This talk presents the most recent DVCS helicity amplitude formulations aimed at extracting CFFs and explores their distinctive kinematic characteristics.