The 10th International Workshop on Chiral Dynamics



Contribution ID: 60 Type: Parallel-Hadron Structure

Overview of GPD Studies

Generalized Parton distributions (GPDs) are a new theoretical tool that was developed in the late 90s. GPDs not only link the well-known form factors and parton distribution functions but also provide much richer correlation information between the transverse location and the longitudinal momentum of partons. More importantly, they can access the contribution of the orbital angular momentum of quarks (and gluons) to the nucleon spin via Ji's spin sum-rule. Several exclusive physics processes can probe GPDs, including Deeply Virtual Compton Scattering (DVCS), Deep Virtual Meson Production (DVMP), Time-Like Compton Scattering (TCS), as well as the Double DVCS. A brief introduction of the GPDs will be given followed by a review of past, ongoing and future experimental programs at Jefferson Lab (SoLID, CLAS12, etc), Electron-Ion Collider in China and the U.S., and other places.

Primary author: YE, Zhihong (Tsinghua University)

Presenter: YE, Zhihong (Tsinghua University)