

First Circular

Generalized Parton Distributions and Global Analysis

Venue: Center for Nuclear Femtography, Jefferson Lab, Newport News, VA

Dates: June 12 - June 14, 2023

Jefferson Lab, the future Electron-Ion Collider, as well as other facilities worldwide, are producing and will continue to produce data of unprecedented quality and reach that will transform our ability to construct a three-dimensional picture of the internal structure of nucleons and nuclei. A key measure of that structure is encapsulated in the Generalized Parton Distributions (GPDs). To realize a faithful description of GPDs requires a dedicated effort encompassing theory, phenomenology, lattice QCD, and machine learning to fully exploit the opportunities that the new experimental data afford.

The aim of this workshop is to bring together interdisciplinary experts to assess the current status of the 3D internal structure of the nucleon, and to identify the requirements to develop a coherent approach for the extraction of the salient physics information from data. The workshop will include a mixture of talks and working group discussions. We hope to carve a common path forward, addressing the lead open questions and setting up benchmarks for the various groups to compare their results. In this spirit, we encourage active participation, to shape, in particular, the discussion outcome, and to define future actionable points.

More information on the discussion groups organization will be communicated in the next several weeks. Please refer to our website <https://indico.jlab.org/event/713/> for more details on the workshop program. Travel and lodging information will be also available soon.

Should you need local support please contact Latifa Elhouadrhiri at latifa@jlab.org.

We are looking forward to a workshop which, being true to its meaning, will be filled with vibrant discussions towards developing a concrete set of strategies to attack the many intricate details of the 3D nuclear structure.

The Organizing Committee

Marie Boer
Latifa Elhouadrhiri
Brandon Kriesten
Simonetta Liuti
David Richards