Speaker: M. Goharipour

Title: Study the Nucleon Structure through Generalized

Abstract:

In this presentation, I will discuss generalized parton distributions (GPDs), focusing on their role in probing nucleon structure. GPDs provide a unified framework connecting parton distribution functions (PDFs), form factors (FFs), and nucleon tomography, offering deeper insights into quark and gluon dynamics. I will review some important physical processes involving GPDs and briefly explain the theoretical and phenomenological framework to extract GPDs through the standard QCD analysis of experimental data. Additionally, I will highlight recent advances from the MMGPDs Collaboration, showcasing progress in constraining GPDs and their implications for our understanding of nucleon structure.