

## **Structure and spin of the nucleon**

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Four decades of lepton-nucleon scattering experiments revealed several intriguing aspects of nucleon structure. One of the most surprising results is the unexpectedly small fraction of the proton's spin that is due to the contribution from quarks and antiquarks. Studies of orbital motion of partons attracted a huge amount of theoretical and experimental interest. In recent years parton distributions, describing longitudinal momentum, helicity and transversity distributions of quarks and gluons, have been generalized to account also for transverse degrees of freedom. Two new sets of more general distributions, Transverse Momentum Distributions (TMDs) and Generalized Parton Distributions (GPDs) were introduced to describe transverse momentum and space distributions of partons.

Great progress has been made since then in measurements of different Single Spin Asymmetries (SSAs) in semi-inclusive and hard exclusive processes providing access to TMDs and GPDs respectively. Facilities world-wide involved in studies of the 3D structure of nucleon in electroproduction include HERMES at HERA, CLAS and Hall-A at JLab and COMPASS at CERN. TMD studies in Drell-Yan process are also becoming an important part of the program of hadron scattering experiments. Studies of GPDs and TMDs are also among the main driving forces of the JLab 12 GeV upgrade project and future facilities, such as GSI and EIC.

In this talk we present an overview of the latest developments in studies of TMDs and GPDs and discuss newly released results, ongoing activities, as well as some future measurements.