Contribution ID: **28** Type: **not specified**

The TMD Physics Program at JLab

Monday, 5 June 2023 10:30 (40 minutes)

In the recent years, it has been realized that deep-inelastic scattering with polarization control could provide a variety of spin and azimuthal angle dependent observables sensitive to the quark-gluon interactions. New parton distributions and fragmentation functions have been introduced to describe the rich complexity of the hadron structure and move towards a multi-dimensional imaging of the underlying parton correlations. Besides the hard probe scale, these functions explicitly depend on the parton transverse degrees of freedom at the scale of confinement. Their study promises to open a unprecedented gateway to the peculiar nature of the strongly interacting force. This work presents a selection of available observations and upcoming measurements planned at Jefferson Lab to address the mysteries of the nucleon structure from a modern point of view.

Presenter: CONTALBRIGO, Marco