Contribution ID: **120** Type: **Talk in workshop 2: "QCD analysis of nucleon structure"**

Jet Production in Polarized Deep Inelastic Scattering

Wednesday, 1 November 2023 17:25 (25 minutes)

In this talk I present our work on the calculation of exclusive single jet and dijet production cross sections in polarized DIS. The NLO accuracy results are obtained with our extension of the dipole subtraction method to account for initial state polarized processes. In the case of single jet production, we also reach NNLO accuracy by applying the projection-to-Born (P2B) subtraction method. We consider the case of pure photon exchange as well as full neutral-current (NC) and charged-current (CC) processes where the weak boson W± and Z are involved. The calculation is fully implemented in our Monte Carlo code POLDIS, which is used to study the phenomenological implications of the results obtained in the kinematics of the future Electron-Ion Collider (EIC) and how they will impact on our knowledge on the spin decomposition of hadrons.

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