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Jets for 3D imaging¹

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The EIC will produce the first-ever jets in DIS off polarized protons, so it will have the potential for a truly unique jet program. In this talk, I will focus on the prospects of using jets to study the 3D-imaging of the proton. I will discuss the experimental feasibility of measurements such as electron-jet and neutrino-jet correlations, jet fragmentation, and jet substructure. I will present statistical projections and predictions for jet-based measurements of Sivers and Collins asymmetries. I will discuss requirements for the EIC detectors. I will argue that a jet program at the EIC could unleash a new era in the field of 3D imaging of the nucleon.

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