

Jet Physics at an EIC

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Jets have been important observables in high-energy collider experiments for over four decades and have provided discoveries and insights in electron-positron, electron-hadron, hadron-hadron, and nucleus-nucleus collisions. With advances in experimental technique and theoretical understanding, jets have become precision tools in the exploration of QCD. As the primary purpose of the future electron-ion collider (EIC) is a detailed understanding of QCD, precision jet measurements will be an important component of both the electron-hadron and electron-nucleus EIC physics programs. This presentation will discuss experimental aspects of jet physics at an EIC, including kinematics, backgrounds, and detector effects. Several analysis examples will also be detailed, such as the use of dijets to constrain the partonic structure of the photon as well as the gluon contribution to the spin of the proton.

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