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The Ultimate QCD Microscope: An Overview of Jet Physics at the EIC

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The goal of the future Electron-Ion Collider (EIC) is to gain a more complete understanding of the QCD dynamics that give rise to the properties of all nucleons and nuclei. This ambitious program will be made possible both by the superior performance of the machine, and by a diverse set of physical observables and related theoretical frameworks. Over the past several years, there has been a growing recognition that jets will be an important addition to this toolbox of observables and give insights into all facets of the EIC physics program. This talk will provide an overview of jet physics as it pertains to the EIC and highlight several results from the recently completed EIC User Group Yellow Report, which details specific jet measurements and the detector requirements needed to realize a successful EIC jet program. Some thoughts on future directions and opportunities will also be presented.