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Jets as precision probes in electron-nucleus collisions at the Electron-Ion Collider MIGUEL ARRATIA, University of California, Riverside — The EIC will be the first e-A collider and will produce the first jets in nuclear DIS. Jets will enable new type of studies of nuclei that extend beyond traditional single-hadron measurements. In this talk, I discuss the prospects of using jets as precision probes in e-A collisions at the Electron-Ion Collider (EIC). Jets produced in deep-inelastic scattering can be calibrated by a measurement of the scattered electron. Such electron-jet "tag and probe" measurements call for an approach that is orthogonal to most HERA jet measurements as well as previous studies of jets at the EIC. I will discuss the feasibility of several measurements such as the electron-jet momentum balance, azimuthal correlations and jet substructure, which can provide constrain the parton transport coefficient in nuclei. We compare simulations and analytical calculations and provide estimates of the expected nuclear effects. This talk is based on: https://arxiv.org/abs/1912.05931.

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