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The Electron-Ion Collider – overview and few-body opportunities

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The Electron-Ion Collider (EIC), which received a high recommendation in the long-range plan, is envisioned as the next-generation US facility for exploring the strong interaction (QCD). The program will include mapping the spin- and spatial structure of the quark and gluon sea in the nucleon, understanding the emergence of hadronic matter from color charge, and probing the gluon fields in nuclei. The EIC will provide beams of polarized electrons and light-ion beams, as well as unpolarized heavy ions, and advanced detectors capable of precisely measuring nuclear fragments – creating new opportunities for exciting few-body physics.