HAW14-2014-020090

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Abstract for an Invited Paper for the HAW14 Meeting of the American Physical Society

Electron-Ion Collider - Plans for Realization

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Understanding the emergence of nucleons and nuclei and their interactions from the properties and dynamics of quarks and gluons in Quantum Chromo-Dynamics (QCD) is a fundamental and compelling goal of nuclear science. An Electron-Ion Collider (EIC) was designated in the 2007 Nuclear Physics Long Range Plan as "embodying the vision for reaching the next QCD frontier," extending the QCD science programs in the U.S. established at both the CEBAF accelerator at JLab and RHIC at BNL in dramatic and fundamentally important ways. The 2013 Report of the NSAC Subcommittee on Major Nuclear Physics Facilities for the Next Decade reaffirmed an EIC as "absolutely central in its ability to contribute to world-leading science in the next decade." Two proposals for the EIC are being considered in the U.S.: one each at BNL and at Jefferson Laboratory. In this presentation we will review these proposals of the EIC, their implementation plan, and comment on the physics opportunities they present to the nuclear science communities in the next decade.