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Status of Electron Ion Collider designs and RD

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A U.S.-based Electron-Ion Collider (EIC) has recently been endorsed by the U.S. National Academies of Sciences, Engineering, and Medicine (NAS). This brings the realization of such a collider another step closer, after its earlier recommendation in the 2015 Long-Range Plan for U.S. nuclear science of the Nuclear Science Advisory Committee “as the highest priority for new facility construction following the completion of FRIB”. Moreover a CD0 is expected to be announced by DOE in 2019. An EIC will be an unprecedented collider that will need to maintain high luminosity ($1E33-1E34 \text{ cm}^{-2} \text{ s}^{-1}$) over a very wide range of Center-of-Mass energies (20 GeV to 100 GeV, upgradable to 140 GeV), while accommodating highly polarized beams and many different ion species. A multi-laboratory collaboration is presently working on two site-specific EIC designs - eRHIC led by Brookhaven National Laboratory and JLEIC led by Jefferson Lab. The present talk will summarize the status of Electron Ion Collider designs and RD.