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Design update on the EIC electron storage ring

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The Electron-Ion Collider (EIC) aims at a luminosity of $10^{34} \text{ cm}^{-2} \text{ sec}^{-1}$. Its Electron Storage Ring (ESR), which will be installed in the existing RHIC tunnel, will store electron beams from 5 to 18 GeV with beam currents up to 2.5 A. The design of the ESR has matured substantially. We will report the design status, including beam dynamics and polarization aspects, value engineering attempts, and latest developments of the injection scheme driven by changes in the injector chain.

Footnotes

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LaTeX

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America

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