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The EIC accelerator – design highlights and project status

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The design of the electron-ion collider (EIC) at Brookhaven National Laboratory is well underway, aiming at a peak electron-proton luminosity of $10e+34 \text{ cm}^{-2} \cdot \text{sec}^{-1}$. This high luminosity, the wide center-of-mass energy range from 29 to 141 GeV (e-p) and the high level of polarization require innovative solutions to maximize the performance of the machine, which makes the EIC one of the most challenging accelerator projects to date. The complexity of the EIC will be discussed, and the project status and plans will be presented.

Footnotes

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