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**Concepts for High Luminosity Electron-Ion Colliders: Developments and Current Status**

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Three concepts for a polarized, high luminosity ( $10^{33}$ - $10^{35}$   $\text{cm}^{-2} \text{sec}^{-1}$ ) electron-ion collider (EIC) of 50 – 150 GeV center-of-mass energy are currently studied in the US: A conventional ring-ring version and a more ambitious linac-ring version of eRHIC collide electrons from a storage ring or in an energy recovery linac with the hadron beams of RHIC. A more futuristic concept involves colliding figure – 8 shaped electron and hadron storage rings using electrons from CEBAF involving very high bunch collision rings to achieve maximal luminosity. First ideas for an electron-ion collider at the LHC (LHeC) are presented.