

The Status and Opportunities at the Electron Ion Collider

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A high-luminosity high-energy polarized electron-ion/proton collider (EIC) with variable Center of Mass Energies (CME) between 30-140 GeV will be built jointly by Brookhaven National Laboratory (BNL) and Jefferson Laboratory (JLab) at BNL in New York, US. When completed it will be the only polarized e-p/light-ion collider and the first and only e-Heavy-Ion collider in the world. The EIC is expected to begin collisions starting early 2030's and operate for approximately two decades. Its operation and performance requirements driven by the exciting and challenging science —to study role of gluons in QCD —make the EIC (arguably) the most complex accelerator project ever undertaken. A full-acceptance hermetic detector is being designed and will be built by a newly formed ePIC Detector Collaboration. Seeds are being sown for a second detector. In this talk I will present the status of the machine, the detector ideas, and invite groups to join this exciting project not only to take advantage of this scientific opportunity but also to educate future generations of African scientists.

Abstract Category

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