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Developing detectors for the future Electron-Ion Collider

GREG KALICY, The Catholic University of America

The next generation facility for QCD in the United States will be the Electron-Ion Collider (EIC), planned to be built in the Brookhaven National Laboratory (BNL). The EIC will be a powerful new high-luminosity facility with the capability to collide high-energy electron beams with high-energy proton and ion beams, providing access to those regions in the nucleon and nuclei where their structure is dominated by gluons. After defining guidance for a general-purpose detector concept and the underlying technologies to meet the physics requirements in EIC Yellow Report a call for detector proposals was announced with deadline for December 2021. Three detector concepts are being developed with different approaches to execute experimental programs that aim to increase our understanding of the fundamental structure of all visible matter. This talk will present the general guidance for the EIC detector with few examples of similarities and differences in the proposals.