Contribution ID: **96** Type: **Plenary invited presentation**

The electron-ion collider – A world wide unique collider to unravel the mysteries of visible matter

Friday 18 November 2022 11:10 (50 minutes)

Understanding the properties of nuclear matter and its emergence through the underlying partonic structure and dynamics of quarks and gluons requires a new experimental facility in hadronic physics known as the Electron-Ion Collider (EIC). The EIC will address some of the most profound questions concerning the emergence of nuclear properties by precisely imaging gluons and quarks inside protons and nuclei such as their distributions in space and momentum, their role in building the nucleon spin and the properties of gluons in nuclei at high energies. In January 2020 the EIC received CD-0 and Brookhaven National Laboratory was selected as site, and June 2021 CD-1. This presentation will give highlights on the EIC science program, introduce the experimental equipment and its integration into the accelerator and give the status of the EIC project, as well what are the next major steps.

Poster fallback option for rejected abstracts for parallel oral presentations

Does not apply

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Session Classification: Plenary session

Track Classification: QCD, QGP and Heavy ion physics