Joint DESY and University of Hamburg Accelerator Physics Seminar

THURSDAY, 28.07.2022 14:30

Hybrid Seminar:

Seminar Room 30b/459 & zoom Video Access

Progress on the Electron Ion Collider

Ferdinand Willeke

Brookhaven National Laboratory

Abstract

The Electron Ion Collider that will collide electrons with ions from proton to Uranium is being built at Brookhaven National Laboratory. The project is carried out in collaboration between BNL and JLAB and will include further collaborators. The collider has ambitious performance goals such as high luminosity of $\mathcal{L} = 1 \cdot 10^{34}$ cm^{-2} s^{-1} and beam polarizations of 70% for both electrons and light hadrons. The center of mass energy of collisions ranges between 29 GeV and 140 GeV (for *e*-*p* collisions). The electron ion collider passed the critical milestone "CD-1" which marked the end of the conceptual design in June 2021.

We are now working on the engineering design and are consolidating the accelerator science base of the collider. We plan to commit to a cost plan and a schedule by January 2024 and will start with the construction of the components in the same year. Installation of the collider will start in 2027 and commissioning is in 2029. First operation for physics is planned in the 2031 timeframe.

Access to seminar room 30b/459 only for a limited no. of participants!
Please consider our zoom link!

NOTE THE UNUSUAL DATE AND TIME

W.Hillert, (Univ. HH), I.Agapov (MPY) and M.Vogt (MFL).

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