FCC Week 2025



Contribution ID: 57

Type: (a) Talk abstract only

Polarization status at the Electron Ion Collider

Thursday 22 May 2025 16:10 (20 minutes)

The Electron-Ion Collider (EIC) is a future facility to be constructed at Brookhaven National Laboratory. This collider will probe the spin structure of nuclei, and the quarks and gluons they contain. This will be facilitated by collisions of polarized electrons on polarized protons and other polarized light ions. For electron and hadron beams, the required polarization is 70%. An overview of polarization loss mechanisms and their mitigation in the electron injectors, the Electron Storage Ring, the hadron injectors, and the Hadron Storage Ring is given.

Authors: HAMWI, Eiad (Cornell University); Dr WANG, Erdong (Brookhaven National Laboratory); HOFF-STAETTER, Georg; HUANG, Haixin (Brookhaven National Lab); HOCK, Kiel; SIGNORELLI, Matthew (Cornell University); NAGAITSEV, Sergei (Brookhaven National Lab); PTITSYN, Vadim; RANJBAR, Vahid; SCHOEFER, Vincent (BNL)

Presenter: HOCK, Kiel

Session Classification: Joint effort PED & accelerators

Track Classification: Physics, Experiments and Detectors: EPOL