eeFACT 2025 - 70th ICFA Advanced Beam Dynamics Workshop on High Luminosity Circular e+e-Colliders



Contribution ID: 54

Type: Invited Oral Presentation

Polarization status at the EIC

The Electron-Ion Collider (EIC) at Brookhaven National Laboratory will collide polarized protons between 41 and 275 GeV against polarized electrons ranging from 5 to 18 GeV, achieving luminosities up to 10^34 cm^{-2} s^{-1}. We review the factors impacting the expected polarization transmission and lifetime for the EIC's Electron injector systems, Storage Ring (ESR), the Hadron injector systems and storage ring (HSR).

Footnotes

Funding Agency

Work supported by Brookhaven Science Associates, LLC under Contract No. DE-SC0012704 with the U.S. Department of Energy

I have read and accept the Privacy Policy Statement

Yes

Primary author: Dr RANJBAR, Vahid (Brookhaven National Laboratory (BNL))

Co-authors: MONTAG, Christoph; HAMWI, Eiad (Cornell University (CLASSE)); WANG, Erdong (Brookhaven National Laboratory); HOFFSTAETTER, Georg (Cornell University (CLASSE)); HUANG, Haixin (Brookhaven National Laboratory); LOVELACE III, Henry (International Institute for Accelerator Applications); HOCK, Kiel (Brookhaven National Laboratory); SIGNORELLI, Matthew (Cornell University (CLASSE)); NAGAITSEV, Sergei (Brookhaven National Laboratory (BNL)); PTITSYN, Vadim (Brookhaven National Laboratory (BNL)); SCHOEFER, Vincent (Brookhaven National Laboratory); BERGAN, William (Brookhaven National Laboratory)

Presenter: Dr RANJBAR, Vahid (Brookhaven National Laboratory (BNL))

Session Classification: Polarization, Energy calibration, Monochromatization

Track Classification: WG8: Polarization, Energy calibration, Monochromatization