



Contribution ID: 1553 Contribution code: MOPS072

Type: **Poster Presentation**

Study of particle loss in synchrotron phase space injection for the EIC electron storage ring using weak-strong beam-beam simulation with nonlinear lattice

Monday 2 June 2025 16:00 (2 hours)

In this study, we use tracking simulation to investigate the feasibility of synchrotron phase space injection for the electron storage ring (ESR). Our simulation model includes both beam-beam interaction and the nonlinearity of ESR lattice. The sensitivity of the particle loss against various injection parameters will be presented.

Footnotes

Paper preparation format

LaTeX

Region represented

America

Funding Agency

Author: KAN, Yi-Kai (Lawrence Berkeley National Laboratory)

Co-author: XU, Derong (Brookhaven National Laboratory)

Presenter: KAN, Yi-Kai (Lawrence Berkeley National Laboratory)

Session Classification: Monday Poster Session

Track Classification: MC1 :Colliders and Related Accelerators: MC1.A19 Electron-Hadron Colliders