NAPAC25 - North American Particle Accelerator Conference 2025



Contribution ID: 266 Contribution code: TUP076

Type: Poster Presentation

Overview of FCC-ee beam-beam studies

Tuesday 12 August 2025 16:00 (2 hours)

Achieving the ambitious luminosity target at the proposed Future Circular Collider e+e- (FCC-ee), collisions with high intensity and small beam size are required, limiting the choice of design parameters. As a result, the beam dynamics at the FCC-ee will be dominated by beam-beam effects at collisions, and the interplay of these with various other beam dynamical effects in the machine, such as impedances, electron cloud and lattice nonlinearities. The study of the resulting complex dynamics requires the usage of sophisticated and efficient numerical tools. This contribution aims to give an overview on FCC-ee beam-beam studies, highlighting key results, tool developments and challenges.

Please consider my poster for contributed oral presentation

No

Would you like to submit this poster in student poster session on Sunday (August 10th)

No

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

Author: KICSINY, Peter (European Organization for Nuclear Research)

Presenter: KICSINY, Peter (European Organization for Nuclear Research)

Session Classification: TUP: Tuesday Poster Session

Track Classification: MC1 - Colliders and other Particle and Nuclear Physics Accelerators