

# eeFACT 2025 - 70th ICFA Advanced Beam Dynamics Workshop on High Luminosity Circular e<sup>+</sup>e<sup>-</sup> Colliders



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## Optics correction for the electron positron future circular collider: nominal and ballistic optics

The proposed electron-positron Future Circular Collider (FCC-ee) is planned to achieve unprecedented high luminosity, enabling answers to fundamental questions in high-energy physics. Magnets field imperfections and misalignments significantly impact beam dynamics and can strongly affect the collider's performance. In this contribution, we present the current status of a developed correction procedure, as well as the alignment and field tolerances for the FCC-ee at Z-energy nominal lattice and a dedicated ballistic optics that will be used during the initial commissioning phase. proper sequence of the initial commission phase has been defined.

### Footnotes

### Funding Agency

### I have read and accept the Privacy Policy Statement

Yes

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