



Contribution ID: 1114 Contribution code: MOPC85

Type: **Poster Presentation**

## Haissinski distribution of electron beam in Electron-Ion Collider and its impact on the hadron beam

*Monday, 20 May 2024 16:00 (2 hours)*

The longitudinal distribution of the electron beam in the electron storage ring of the Electron-Ion Collider will be modified by the machine impedance. The modified distribution, combined with crab cavities may have an impact on the quality of the hadron beam during the collision. In this paper, we will explore the possible impact on the hadron beam quality with strong-strong and weak-strong beam-beam simulations.

### Footnotes

### Funding Agency

### Paper preparation format

LaTeX

### Region represented

North America

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**Session Classification:** Monday Poster Session

**Track Classification:** MC1: Colliders and other Particle and Nuclear and Physics Accelerators: MC1.A19 Electron-Hadron Colliders