Contribution ID: **106** Contribution code: **TUP003** Type: **Poster Presentation**

Accelerator physics design requirements and challenges of RF based electron cooler for EIC injection energy

Tuesday 12 August 2025 16:00 (2 hours)

Cooling of hadrons in Electron Ion Collider (EIC) at the injection energy is critical to achieving EIC design parameters. A 13 MeV electron cooler fit for the task is presently under design.
This cooler will use RF-accelerated electron bunches and will provide strong cooling of the hadrons having energy of 24 GeV/nucleon. The paper describes optimization of the cooling performance, taking into account space charge, IBS and other effects, and provides physics requirements for the cooler.

Please consider my poster for contributed oral presentation

Yes

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

No

Footnotes

Funding Agency

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I have read and accept the Privacy Policy Statement

Yes

Author: FEDOTOV, Alexei (Brookhaven National Laboratory)

Co-authors: KAYRAN, Dmitry (Brookhaven National Laboratory); SELETSKIY, Sergei (Brookhaven National Laboratory)

Presenter: FEDOTOV, Alexei (Brookhaven National Laboratory)

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