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Hadron Beam Cooling Concept and Cooler Design Status for the EIC

Tuesday 28 October 2025 09:00 (30 minutes)

Cooling of hadrons in Electron Ion Collider (EIC) is critical to achieve EIC design parameters and performance. In this talk we will discuss strategy of hadron beam cooling application for the EIC starting with providing strong cooling of proton beam emittances at injection energy of 24 GeV and potential subsequent cooling at the top collision energies. We will then discuss requirements, challenges and design status of RF-based electron cooler for 24 GeV proton energy.

Footnotes

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I have read and accept the Privacy Policy Statement

Yes

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