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Results of the Coherent electron Cooling experiment at RHIC

Monday 27 October 2025 16:30 (30 minutes)

Coherent electron Cooling (CeC) experiment aims on demonstrating cooling of ion beam circulating in RHIC yellow ring. The experiment will end by the end of 2025, when RHIC operations stop for construction of Electron-Ion Collider. In this talk I will present summary of the CeC experiments with special focus won the use and the control of the broad-band micro-bunching Plasma Cascade Amplifier with bandwidth of 15 THz. I will also discuss connection of this experiment with the developing future proton beam cooler for Electron Ion Collider.

Footnotes

Funding Agency

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Author: LITVINENKO, Vladimir (Stony Brook University)Presenter: LITVINENKO, Vladimir (Stony Brook University)Session Classification: Advanced Cooling R&D Session

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