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Laser Cooling of Relativistic Ion Beams

Tuesday 28 October 2025 13:30 (30 minutes)

This talk discusses fundamentals of ion beam cooling with continuous wave and pulsed laser systems at relativistic energies. It starts with reviewing key aspects of laser cooling of ion beams before discussing recent expeimental results from Germany and China. It then looks at the prospects of integrating permanent laser coolers into storage ring facilities such as SIS 100 at FAIR an the possibilities for studying beam dynamics, plasma physics, atomic physics of highly charged ions and fundamental physics with these beams.

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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