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Preliminary experimental analysis of CSR shielding effects in a chicane compressor

Tuesday 12 August 2025 16:00 (2 hours)

We present preliminary analysis results from a recent experiment investigating CSR shielding effects on a beam propagating through a chicane compressor. The experiment was conducted at the Argonne Wakefield Accelerator (AWA) facility. Two identical doglegs with reversing quadrupoles—flip the beam—allow the beam-line to function as a chicane. Shielding gaps of 1, 2, and 3 cm were tested using manually adjustable plates inside the dipole magnet chambers. The longitudinal phase space was measured both upstream and downstream of the chicane. To compare CSR-dominated propagation with ignorable CSR case, a wide slit was also applied to cut the beam charge.

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No

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

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