



Contribution ID: 570 Contribution code: SUP063

Type: Poster Presentation

Design of phase diversity Electro-Optic Sampling of THz Coherent Transition Radiation

Sunday 10 August 2025 15:00 (3 hours)

We report progress on the design of a Phase Diversity Electro-Optic Sampling (DEOS)-based longitudinal profile measurement system. The current design uses THz coherent transition radiation (CTR) to convey the bunch's longitudinal information. A 1550nm fiber laser available at the Argonne Wakefield Accelerator facility will be used as the probe for electro-optic sampling. Specifically, we discuss pulse synchronization and probe beam transport, the design and optimization of the probe beam stretcher, and the design of the probe beam detection system.

Please consider my poster for contributed oral presentation

No

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

Yes

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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Session Classification: SUP: Sunday Student Poster Session

Track Classification: MC6 - Beam Instrumentation, Controls, AI/ML, and Operational Aspects