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Type: Poster Presentation

Resolution enhancement of double-differential spectrometer images

Monday 11 August 2025 16:00 (2 hours)

By pairing the effects of a transverse deflecting cavity and dipole magnet, a beam's longitudinal phase space (LPS) can be imaged on a screen. However, the emittance of the beam, chromatic focusing, and other effects are convolved into the resulting screen image, functionally blurring it, reducing the fidelity of the LPS measurement. Here, we explore the use of both conventional, space-variant deconvolution as well as machine-learning approaches to better resolve the LPS.

Please consider my poster for contributed oral presentation

Yes

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

No

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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