Contribution ID: **383** Contribution code: **TUP093** Type: **Poster Presentation**

Start-to-end simulation study for transverse wiggler-based manipulation experiment

Tuesday 12 August 2025 16:00 (2 hours)

We present a simulation study to support the planning of experimental demonstrations of transverse wiggler-based correlation control. While previous simulations confirmed the feasibility of this approach, they did not incorporate realistic field maps of the transverse wigglers. In addition, the impact of various jitter and error sources—key concerns for experimental implementation—has not been analyzed. In this study, wiggler fields are generated through magnetostatic simulations and incorporated into start-to-end particle tracking simulations. The phase space responses to different jitter and error sources are also evaluated.

Please consider my poster for contributed oral presentation

No

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

Author: HA, Gwanghui (Northern Illinois University)

Co-author: SINHA, Deeksha (Northern Illinois University)

Presenter: HA, Gwanghui (Northern Illinois University)

Session Classification: TUP: Tuesday Poster Session

Track Classification: MC5 –Beam Dynamics and EM Fields