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Recent optimization results of nonlinear beam dynamics for complex bend lattice

Tuesday 12 August 2025 16:00 (2 hours)

Nonlinear beam dynamics is essential for a low emittance complex bend lattice. Therefore, a multi-objective optimization to simultaneously achieve a large dynamic aperture and momentum aperture is needed, although it is becoming increasingly challenging. In this paper, we discuss the search for optimal arrangement of chromatic sextupole and octupoles as well as optimal tunes of the ring. We also present the recent results of optimized dynamic aperture and momentum aperture for a complex bend lattice.

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

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