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Online optimizations of NSLS-II Linac and Linac-to-Booster beam lines using machine learning methods

Monday 11 August 2025 16:00 (2 hours)

The NSLS-II is a cutting-edge 3 GeV storage ring light source around the world. The electron beam is initially accelerated in a linear accelerator to an energy of 170 MeV and subsequently accelerated in a booster synchrotron to a beam energy of 3 GeV. Therefore, the performance of the Linac and the Linac-to-Booster beam lines is imperative for beam injection to the booster. Online optimization is an effective solution to improve accelerator performance when there is degradation. This paper presents the results of online optimization employing a machine learning method.

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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