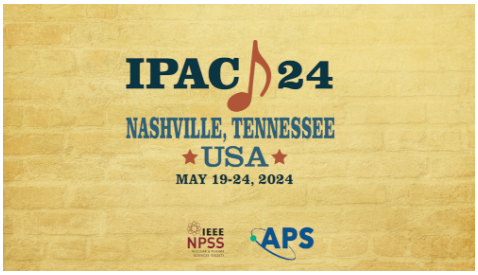

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Bunch compression with a beam energy control unit consisting of DBA structures

Monday, 20 May 2024 16:00 (2 hours)

The bunch-to-bunch energy control of the electron beam is crucial in the continuous wave XFEL facility. Recently, a delay system based on Double Bend Achromat (DBA) was proposed for the SHINE linear accelerator to achieve this goal. On this basis, we further optimize this structure to realize the bunch compression/decompression while maintaining the electron beam qualities. Here, we will discuss the related lattice design and strat-to-end simulations.

Footnotes

Funding Agency

Paper preparation format

Region represented

Asia

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