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Progress towards kick and cancel injection for Diamond-II

Tuesday 3 June 2025 16:00 (2 hours)

With the aim of maintaining transparent and efficient injection during top-up, a kick-and-cancel injection scheme has been developed for Diamond-II. In this, stripline kickers are used with 3 ns pulses to deflect individual bunches, with the stored bunch receiving two kicks separated by 180 degrees phase advance to leave it on-axis and the injected bunch timed to arrive at the second kick. In this paper we present progress with the hardware design and recent prototyping results, alongside updates to the simulations.

Footnotes

Paper preparation format

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