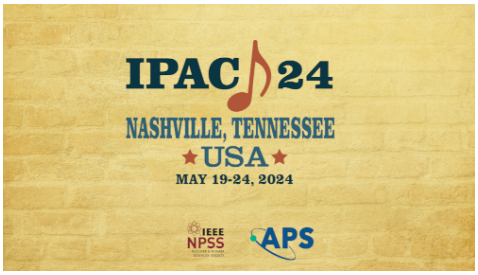

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Development of a non-linear injection kicker for the TPS storage ring

Thursday, 23 May 2024 16:00 (2 hours)

The TPS storage ring adopts a standard four kickers bump off-axis injection. This scheme is known to disturb stored beam during injections. The non-linear kicker injection concept provides a possible solution to facilitate top off injection with minimizing the oscillation of the stored beam. This non-linear kicker has zero Bx and By field in the center and an off-axis By displaced by 15 mm for TPS case. In this paper, we present the magnetic circuit design, consideration, fabrication, and first field measurement results of the TPS non-linear injection kicker.

Footnotes

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Paper preparation format

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Asia

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