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Beam injection with an anti-septum into the HALF storage ring

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Compared to the conventional injection scheme, the three-kicker bump injection scheme with an anti-septum has two advantages. One is less requirement of dynamic aperture thanks to the thin blade of the anti-septum, the other is less installation space requirement of the injec-tion system. Both are beneficial to the beam injection for the fourth generation light sources. In this study, the application of this injection scheme to the HALF storage ring is presented. The layout and parameters of the injec-tion system are designed and the injection process is simulated. The results of the injection efficiency and the effect on the stored beam during beam injection is shown in this paper.

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Footnotes

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Yes

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