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Current status of the storage ring design of Korea-4GSR

Wednesday, 10 May 2023 16:30 (2 hours)

Korea-4GSR is a greenfield electron storage ring with circumference of 800 m and natural emittance of 60 pm. Preliminary conceptual lattice design of Korea-4GSR is fully periodic 28-cell H7BA. By keeping the conceptual design as much as possible, we have been exploring modification on the design for higher brightness and better nonlinear properties such as dynamic aperture and Touschek lifetime. We present which optics conditions can be satisfied upon the current lattice framework and how much cost is required in terms of magnet strengths and aperture radius.

Funding Agency

Footnotes

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Yes

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