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## Korea-4GSR Lattice Update

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Korea fourth generation storage ring (Korea-4GSR) is the low emittance storage with an emittance of 61 pm and a circumference of 800 m. The design has been updated to add an injection straight section, where the beta function intentionally made to have high value to relieve the requirement of the off-axis injection. With the injection straight section, the improvement of the injection efficiency was confirmed through the tracking simulation considering various storage ring errors. We also investigated the nonlinear properties of the updated lattice including intrabeam scattering effect and Touschek lifetime.

### Funding Agency

### Footnotes

### I have read and accept the Privacy Policy Statement

Yes

**Primary authors:** JANG, Gyeongsu (Pohang Accelerator Laboratory); Dr KIM, Jaehyun (Pohang Accelerator Laboratory)

**Co-authors:** KIM, Dong Eon (Pohang Accelerator Laboratory); LEE, Jaeyu (Pohang Accelerator Laboratory); SEOK, Jimin (Pohang Accelerator Laboratory); HA, Taekyun (Pohang Accelerator Laboratory)

**Presenter:** JANG, Gyeongsu (Pohang Accelerator Laboratory)

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