

Contribution ID: 615 Contribution code: MOPM060 Type: Poster Presentation

Study of the ramping process for Korea-4GSR

Monday, 8 May 2023 16:30 (2 hours)

The Korea fourth generation storage ring (Korea-4GSR) is a 4GeV, low emittance light source to be built in Ochang, Korea. The booster ring, which consists of 26 FODO standard cells and 2 dispersion-free cells, ramps the beam energy up from 200 MeV to 4 GeV as part of the injector. The circumference and repetition rate of the booster ring is 772.9 m and 2 Hz, respectively. In this paper, the injection scheme, energy ramping curve, eddy current effect, beam parameters changing curve, and RF voltage during the energy ramping in the booster ring will be presented in detail.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

Primary author: LEE, Yumi (Korea University Sejong Campus)

Co-authors: KIM, Eun-San (Korea University Sejong Campus); Dr KIM, Jaehyun (Pohang Accelerator Laboratory); LEE, Jaeyu (Pohang Accelerator Laboratory); HWANG, Ji-Gwang (Helmholtz-Zentrum Berlin für Materialien und Energie GmbH); SHIN, Seunghwan (Korea University Sejong Campus); JANG, Gyeongsu (Pohang Accelerator Laboratory); PARK, Seong Hee (Korea University Sejong Campus); SEOK, Jimin (Pohang Accelerator Laboratory)

Presenter: LEE, Yumi (Korea University Sejong Campus)

Session Classification: Monday Poster Session

Track Classification: MC2: Photon Sources and Electron Accelerators: MC2.A24: Accelerators and

Storage Rings, Other