

Design of the Korea-4GSR Fast Orbit Interlock system

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The new 4th Generation Synchrotron Radiation source (4GSR) will be built in Ochang, South Korea. The Fast Orbit Interlock system (FOI) refers to a system in which the beam detects a normal orbit departure situation inside the storage ring and triggers an interlock signal during accelerator operation. The core of this system is to quickly judge the situation and stop the beam quickly because the out of orbit of the beam during accelerator operation causes peripheral failure and radiation emission over the allowable amount. The system will collect and compute data at 375 kHz intervals, report progress in the design, which includes a series of processes to protect peripherals in case of beam orbital departure.

Paper submission Plan

No

Best Presentation

No

Contribution track

ICABU WG1. Accelerator Systems

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