



Contribution ID: 219 Contribution code: TUPD075

Type: **Poster Presentation**

Design of the Korea-4GSR Timing system

Tuesday 23 September 2025 16:00 (1h 30m)

The event timing system is a system that coordinates and synchronizes events in a precise sequence over time and provides precise timing to local devices. The system consists of an event master (EVM), an event fanout (EVF), and an event receiver (EVR), and each local device receives event, trigger, and timestamp information through EVR. Korea-4GSR transfers 200 MeV electrons to the booster through a linear accelerator, and provides trigger signals to synchronize the injection order into the storage ring after ramping acceleration from the booster to 4 GeV. The system will be configured using MRF's MTCA products, and the EVG and EVR configuration and layout are being designed by investigating the specifications of local devices that receive trigger signals. In addition, the system will be tested by transmitting event codes and trigger signals to embedded EVR equipment such as BPM and FOFB.

Footnotes

Funding Agency

Author: PARK, Sohee (Pohang Accelerator Laboratory)

Co-authors: YU, Jinsung (Pohang Accelerator Laboratory); KANG, Sunwoo (Korea Basic Science Institute); KIM, Yunho (Pohang Accelerator Laboratory)

Presenter: PARK, Sohee (Pohang Accelerator Laboratory)

Session Classification: TUPD Posters

Track Classification: MC04: Hardware Architecture and Synchronization