Contribution ID: **146** Type: **Poster**

Development of a Prototype Fast Orbit Feedback System for the 4GSR.

Thursday, November 14, 2024 1:00 PM (1h 30m)

This study aims to develop a prototype Fast Orbit Feedback System (FOFB) to improve beam orbit stability in the 4th generation synchrotron radiation facility. The FOFB system is designed to detect subtle beam orbit deviations in real time and quickly correct them, ensuring high-precision beam stability. The system's hardware and software are currently under development, with a focus on high-speed data processing, network communication, and real-time control algorithms. The system is designed to offer improved accuracy and response time compared to existing technologies, and its performance will be evaluated in future experiments. This research is expected to provide a critical technological foundation for maintaining stable beam orbits in accelerator facilities.

Paper submission Plan

No

Best Presentation

No

Contribution track

ICABU WG1. Accelerator Systems

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