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Development of EPICS-based data acquisition system for beam loss monitor and sX-Map

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Beam commissioning is underway at STF of KEK. Since beam diagnostics are important to realize stable operation, as one of the beam diagnostics, we have developed a time-resolved beam loss distribution monitor. This monitor can observe a pulsed beam of about 800 μs , separated by every 100 μs , using up to 16 PIN photo diodes as X-ray sensors. Thus, 128 data can be acquired per bunch. The data is read out by an EPICS-based data acquisition system.

On the other hand, we are also developing an EPICS-based data acquisition system for sX-Map, which is inserted inside the stiffener ring at the iris for performance testing of superconducting cavities in vertical test. In this presentation, an overview of these EPICS-based data acquisition systems and their integration with the existing control system will be presented.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

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