

Run and Slow Control System of the Belle II Silicon Vertex Detector

The Belle II Silicon Vertex Detector (SVD) is currently being finalized and commissioned at the SuperKEKB factory, Tsukuba, Japan. For a reliable operation and data taking of the SVD a sophisticated and robust run and slow control system has been implemented, which utilizes the Experimental Physics and Industrial Control System (EPICS) framework.

EPICS uses client/server and publish/subscribe techniques to communicate between the various sub-systems and computers. The information exchange between the different pieces of software and computers is done by process variables (PVs).

These PVs are provided by input/output controllers (IOCs), which communicate and interface with the hardware components.

The Belle II SVD slow and run control comprises of five groups of subsystems, which are SVD DAQ controller, Flash ADC controller, environmental monitors and interlocks, power supplies and EPICS infrastructure services.

In this presentation we describe tasks and implementation of the individual sub-systems, the interaction between them and the global Belle II run and slow control as well as first experiences from commissioning and initial operation of the SuperKEKB accelerator.

Authors: IRMLER, Christian (Austrian Academy of Sciences (AT)); Mr YIN, Hao (HEPHY Vienna)

Presenters: IRMLER, Christian (Austrian Academy of Sciences (AT)); Mr YIN, Hao (HEPHY Vienna)

Session Classification: Poster Session A

Track Classification: Electronics