



Contribution ID: 399

Type: talk

The data acquisition and trigger system of the Belle II experiment

Saturday, 25 July 2015 10:00 (15 minutes)

Both the trigger and the data acquisition systems of the Belle II experiment at the SuperKEKB collider in Tsukuba, Japan, are completely redesigned to cope with the considerably higher event and background rates compared to the previous Belle experiment. Belle II hardware (Level-1) trigger consists of several sub-triggers and a final decision logic, which issues the trigger with a fixed latency of about $5 \mu\text{s}$ after bunch crossing. The data acquisition (DAQ) system reads the detector signals upon the Level-1 trigger decision and transfers the data from the front-end electronics through several steps of data processing to the storage system. In this presentation, we review the design of these two systems and describe the current state of their construction.

additional information

Submitted on behalf of the Belle II collaboration. Actual presenter will be selected by the Belle II collaboration at a later time.

Primary author: SCHWANDA, Christoph (Austrian Academy of Sciences)

Presenter: LI, Chunhua

Session Classification: Detector R&D and Data Handling

Track Classification: Detector R&D and Data Handling