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Status and Performance of the Belle II DAQ System

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The Belle II DAQ system was completely overhauled as part of the detector upgrade from Belle. The raw detector event data is sent from the custom detector frontends through optical links to unified off-detector readout modules (COPPERs). The raw data of up to nine COPPERs is bundled in one readout server each, which forwards the data through a fully connected event builder switch to the High Level Trigger (HLT) and storage system. Apart from an online event selection, the HLT reconstruction is used to identify geometric regions of interest on the inner pixel detector which are then selectively read out and stored with the rest of the event data. As the COPPER system will be only marginally able to handle the Belle II data rate at full luminosity, a DAQ upgrade using PCIe40 cards to replace the COPPERs is under development.

This talk will present the latest running experiences and performance figures of the Belle II DAQ system, as well as the current status of the DAQ upgrade project.

Secondary track (number)

14

Authors: HARTBRICH, Oskar (University of Hawaii at Manoa); Prof. ITOH, Ryosuke (KEK); NAKAO, Mikihiko (KEK); YAMADA, Satoru (KEK); SUZUKI, Soh; KONNO, Tomoyuki (Kitasato University); ZHOU, Qidong (High Energy Accelerator Research Organization (JP)); PARK, Seokhee (Yonsei University); LI, Chunhua; BRAUN, Nils (KIT); GUAN, Yinghui (Indiana university & KEK); PRIM, Markus (KIT); SPRUCK, Björn (Universität Mainz); KUNIGO, Takuto (KEK (IPNS)); REITER, Simon (Uni Giessen); REMNEV, Mikhail (Budker Institute of Nuclear Physics (BINP)); LAUTENBACH, Klemens (Uni Giessen)

Presenter: HARTBRICH, Oskar (University of Hawaii at Manoa)

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