

12th Beam Telescopes and Test Beams Workshop



Contribution ID: 58

Type: Talk

Development of versatile online monitoring for EUDAQ2

Thursday, April 18, 2024 10:20 AM (20 minutes)

During test beam data taking, being able to monitor the quality of the incoming data in real time is of crucial importance. Hence, many test beam users implement their own monitoring tools tailored to their needs. One goal of the AIDAInnova project is to develop common test beam infrastructure, including a versatile online monitoring tool capable of reading any data recorded by EUDAQ2, such that a wide user range can profit from this tool. Some of the limitations existing monitoring tools experience are the lack of flexible event building and no opportunity to do track reconstruction from beam telescope data.

To address these issues and exploit existing synergies with EUDAQ2, the widely used test beam data reconstruction and analysis software 'corrvreckan' is used as base for the monitoring tool. In this presentation we describe the integration into EUDAQ2 in such a way that minimal user input is required.

We present the latest status of development and release of this software. We also showcase setups in which this monitoring has been used successfully in a test beam scenario, such as monitoring of silicon photomultipliers during a test beam of the dual-readout calorimetry group at the SPS at CERN.

Primary authors: LOESCHCKE CENTENO, Andreas (University of Sussex (GB)); HUTH, Lennart (Deutsches Elektronen-Synchrotron (DE))

Co-author: Prof. SALVATORE, Fabrizio (University of Sussex (GB))

Presenter: LOESCHCKE CENTENO, Andreas (University of Sussex (GB))

Session Classification: Infrastructure and software