CALOR 2018 - 18th International Conference on Calorimetry in Particle Physics May 21-25, 2018, Eugene, USA

Type: not specified

The Phase-I Trigger Readout Electronics Upgrade of the ATLAS Liquid Argon Calorimeters

Wednesday 23 May 2018 10:35 (20 minutes)

Electronics developments are pursued for the trigger readout of the ATLAS Liquid-Argon Calorimeter towards the Phase-I upgrade scheduled in the LHC shut-down period of 2019-2020. The LAr Trigger Digitizer system will digitize 34000 channels at a 40 MHz sampling with 12 bit precision after the bipolar shaper at the front-end system, and transmit to the LAr Digital Processing system in the back-end to extract the transverse energies. Results of ASIC developments including QA and radiation hardness evaluations, performances of the final prototypes and results of the system integration tests will presented along with the overall system design.

Secondary topics

Ionization, Noble liquids

Applications

Primary topic

Front-end readout and trigger

Author: MORANGE, Nicolas (Centre National de la Recherche Scientifique (FR))Presenter: ENARI, Yuji (University of Tokyo (JP))Session Classification: Session 9