21st IEEE Real Time Conference - Colonial Williamsburg



Contribution ID: 535

Type: Oral presentation

ALICE Central Trigger Processor for LHC Run 3

ALICE (A Large Ion Collider Experiment) is one of the four main experiments at

CERN Large Hadron Collider. The ALICE collaboration plans a major detector upgrade during long shutdown 2, which is at present foreseen to start at the end of year 2018 followed by Run 3 starting in year 2021. The CTP will manage different interaction rates, 50 kHz in Pb-Pb up to few hundred kHz in pp collisions. The trigger system will also allow for different readout strategies. To cover these requirements the ALICE-CTP will be completely redesigned. The new CTP system consist in a new universal trigger board based in Kintex Ultrascale FPGA able to support up to 20 High-speed links and a novel Timing and Trigger Control system based on Passive Optical Networks. The new trigger downstream (CTP to Detectors) distribution is running with 9.6 GHz signal. The overview and current status of the ALICE-CTP will be presented.

Minioral

Yes

Description

Trigger

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Session Classification: Large Experiments 2