

Detector Control System of the new Muon Forward Tracker at ALICE

The ALICE detector is designed for study of Quark-Gluon Plasma in heavy ion collisions at the LHC. Major upgrades of the detector are planned before the LHC run 3 from 2021. Along with a much higher rate capability to fully utilize the luminosity to be delivered, ALICE will also have enhanced physics capabilities with new addition of detector components.

The Muon Forward Tracker (MFT) is one of the approved ALICE upgrade projects. The silicon trackers in front of the hadron absorber of the existing Muon Spectrometer will allow ALICE new measurements with high resolutions of quarkonia via dimuons and open heavy flavors via single muons and also via separation between primary and secondary vertices.

The detector control system of the MFT will be based on new architectures and frameworks, rather than those in the ALICE detector at present, in association with the planned upgrade of the readout electronics of ALICE from the run 3. Its design with technical strategies and the development status will be presented in this poster.

Preferred Track

Future Experimental Facilities, Upgrades, and Instrumentation

Collaboration

ALICE

Author: SHIGAKI, Kenta (Hiroshima University (JP))

Presenter: SHIGAKI, Kenta (Hiroshima University (JP))

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