Kruger 2022: Discovery Physics at the LHC

KRUGER 2022

Science & innovation

Department
REPUBLIC OF SOUTH AFRICA

Thomas Research

Localization in Acceleration

Localiz

Contribution ID: 25 Type: Oral

Operation and performance of the ATLAS TileCal ALTI system and test-beam results

The Timing, Trigger and Control (TTC) system of the ATLAS Tile Calorimeter has be replaced for the Run 3 data-taking period. A new TTC interface module, the ATLAS Local Trigger Interface (ALTI) has been integrated and commissioned as part of the Phase-I upgrades. The ALTI module participated in the first Run 3 stable beam collisions (July 2022), recording events at \sqrt{s} = 13.6 TeV. The TileCal test-beam TTC system is also being upgraded to use the ALTI module. The test-beam setup is equipped with upgraded electronics for the High Luminosity LHC. The ALTI module will be used for data-taking during the November 2022 test-beam campaign. We present the current status and the first test-beam results with the ALTI module.

Primary author: TLOU, Humphry (University of the Witwatersrand)

Co-author: MELLADO, Bruce (University of the Witwatersrand and iThemba LABS)

Presenter: TLOU, Humphry (University of the Witwatersrand)