



Contribution ID: 1574 Type: **CLOSED - Oral (Student, In Competition) / Orale (Étudiant(e), inscrit à la compétition)**

Studies of cosmic ray events in ATLAS sTGC muon chamber prototypes

Tuesday 30 May 2017 17:00 (15 minutes)

During the ATLAS phase 1 upgrade, which will take place beginning in 2019, the muon system will be upgraded to install a New Small Wheel (NSW) in the forward region in order to improve tracking and trigger performance at very high luminosities. Canadian groups are responsible for construction and testing of small thin gap chambers (sTGC) that will be used in the NSW. The McGill group is responsible for testing these chambers using cosmic ray muons. This talk will describe the selection and analysis of cosmic ray events, based on simulation and cosmic ray data collected using a prototype 40x60cm sTGC quadruplet module, and focusing in particular on events with multiple reconstructed tracks in the detector.

Author: LEGER, Felix (McGill University, (CA))

Presenter: LEGER, Felix (McGill University, (CA))

Session Classification: T4-3 Energy Frontier: Detectors and Future Developments (PPD) | Frontière d'énergie: détecteurs et développements futurs (PPD)

Track Classification: Particle Physics / Physique des particules (PPD)