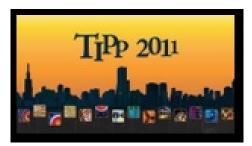
## TIPP 2011 - 2nd International Conference on Technology and Instrumentation in Particle Physics



Contribution ID: 21

Type: Oral Presentation

## The ATLAS Trigger System in 2010 LHC proton-proton collisions

Friday 10 June 2011 14:00 (40 minutes)

The ATLAS trigger system has collected proton-proton collisions over 5 orders of magnitude in instantaneous luminosity during the 2010 LHC running. The trigger system is designed to reduce the event rate from 40MHz to 200Hz using a hardware-based Level 1 Trigger (L1) and a software-based High Level Trigger (HLT). The trigger selection is based on identifying object candidates, such as, electrons, photons, muons, tau leptons, and jets as well as global event features, such as missing transverse energy. This talk will present the commissioning, operations, and performance of the ATLAS trigger system with a focus on the performance of the system with respect to data collected for physics analysis. We describe how the trigger system has evolved with increasing LHC luminosity and give a brief overview of plans for forthcoming LHC running.

Author: RAJAGOPALAN, Srini (Department of Physics-Brookhaven National Laboratory (BNL))
Presenter: RAJAGOPALAN, Srini (Department of Physics-Brookhaven National Laboratory (BNL))
Session Classification: Trigger and DAQ Systems

Track Classification: Trigger and Data Acquisition Systems