



Contribution ID: 495

Type: **Oral Presentation**

## Commissioning and Performance of the CMS High Level Trigger

*Saturday 11 June 2011 10:00 (30 minutes)*

The CMS trigger system has been designed to cope with unprecedented luminosities and accelerator bunch-crossing rates of up to 40 MHz at LHC. The High-Level-Trigger (HLT) combines in a novel way the traditional L2 and L3 trigger components which are implemented in a commercial Filter Farm with thousands of CPUs. The flexibility of a contiguous software environment allows the coherent tuning of the HLT algorithms to accommodate multiple physics channels and enhance the CMS physics reach. We discuss the commissioning and performance of the HLT during the 2010 and 2011 data taking, and present our strategies for coping with increasing collision rates as the LHC luminosity continues to climb towards design specifications.

**Author:** APANASEVICH, Leonard (UIC)

**Presenter:** APANASEVICH, Leonard (UIC)

**Session Classification:** Trigger and DAQ Systems

**Track Classification:** Trigger and Data Acquisition Systems