

Trigger Architecture in the CMS Experiment

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In the CMS experiment, events of potential physics interest are selected by the trigger system, which consists of two-level triggers, the Level-1 (L1) Trigger and the High-Level Trigger (HLT).

The L1 Trigger is a hardware trigger that reduces the rate down to 100kHz, while the HLT is a software trigger running in a computer farm that reduces the rate from 100 kHz to about 1 kHz. The HLT runs a streamlined version of the CMS offline event reconstruction. The

online reconstruction of objects, in particular hadronically decaying tau leptons, will be explained, and the performance of tau lepton triggers for Run 2 data taking will be presented.

Presenter: SERT, Hale (Rheinisch-Westfaelische Tech. Hoch. (DE))