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## **Data analysis at CMS Level-1 Trigger level: Migrating complex selection algorithms from offline analysis and High-Level trigger to the trigger electronics**

With ever increasing luminosity at the LHC, optimum online data selection is getting more and more important. While in the case of some experiments (LHCb and ALICE) this task is being completely transferred to computer farms, the others - ATLAS and CMS - will not be able to do this in the medium-term future for technological, detector-related reasons. Therefore, these experiments pursue the complementary approach of migrating more and more of the offline and high-level trigger intelligence into the trigger electronics. The presentation will illustrate how the Level-1 Trigger of the CMS experiment and in particular its concluding stage, the so-called "Global Trigger", take up this challenge.

### **Experimental Collaboration**

CMS

**Primary author:** WULZ, Claudia (Austrian Academy of Sciences (AT))

**Presenter:** WULZ, Claudia (Austrian Academy of Sciences (AT))

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