

Abstract Submitted
for the APR17 Meeting of
The American Physical Society

ATLAS level-1 calorimeter trigger: Monitoring and data reprocessing DAVID DIMOND, TAE HONG, BENJAMIN CARLSON, Univ of Pittsburgh, ATLAS COLLABORATION — We present the monitoring and data reprocessing for the calorimeter-based hardware level-1 trigger system (L1Calo) for the ATLAS experiment. This trigger system was upgraded after the Run-1 data taking period (2009-2012) to prepare for Run-2 (2015-current), which allowed better control the event rates for algorithms based on jets and/or missing energy. Monitoring tools for the upgraded system is described. We also present a new offline tool to reprocess previous data samples with altered L1Calo settings, such as calibration constants and noise cuts. The samples are used to study the dependence of the event rates and signal efficiencies on the settings. The studies can help plan the appropriate L1Calo settings for upcoming data taking periods as well as for future runs.

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Date submitted: 29 Sep 2016

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