## Triggering Discoveries in High Energy Physics III, High Tatras



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## Description and performance of the current CMS trigger

CMS selects interesting events using a two-tiered trigger system. The first level (L1), composed of custom hardware processors, uses information from the calorimeters and muon detectors to select events at a rate of around 110 kHz within a fixed latency of about 4\mus. The second level, the high-level trigger (HLT), consists of a farm of processors running a version of the full event reconstruction software optimized for fast processing and reduces the event rate to around 5 kHz before data storage. This talk will focus on the improvement on the HLT and L1 trigger achieved during the LHC Run-3, with a look at the performance obtained in data collected during that data-taking period.

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