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# CMS High Level Trigger performance in Run 2 and new developments for Run 3

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The CMS experiment selects events with a two-level trigger system, the Level-1 (L1) trigger and the High Level trigger (HLT). The HLT reduces the rate from 100 kHz to about 1 kHz and has access to the full detector readout and runs a streamlined version of the offline event reconstruction. In Run 2 the peak instantaneous luminosity reached values above 2X 10ˆ34 cm-2 sec-1, posing a challenge to the online event selection. An overview of the object reconstruction and trigger selections used in the 2016-2018 data-taking period will be presented. The performance of the main trigger paths and the lessons learned will be summarized, together with the new developments in view of the coming Run 3.

## I read the instructions

## Secondary track (number)

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