

LHCb upgrades

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The LHCb experiment was designed to measure CP-violation in the b-sector and to study rare decays of b- and c-hadrons at the LHC. The excellent performance of the detector during Run 1 and 2 of the LHC enabled LHCb to produce many interesting results. However, the maximum data rate was limited to by a Level-0 hardware trigger to 1.1 MHz and the trigger yield saturated at higher luminosities for hadronic decays. The experiment was upgraded during Long Shutdown 2 of the LHC to be able to operate the detector at higher luminosity and to introduce a trigger-less read-out that can process data from the complete detector at 40MHz. Further upgrades are planned to fully exploit the flavour-physics opportunities of the HL-LHC, and to study additional physics topics that take advantage of the forward acceptance of LHCb. This talk will focus on the status of the current upgrade and give a brief outlook for the LHCb Upgrade 2.

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