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Implications of LHCb measurements and future prospects

During 2011 the LHCb experiment at CERN collected 1.0 fb^{-1} of $\sqrt{s} = 7 \text{ TeV}$ pp collisions. Due to the large heavy quark production cross-sections, these data provide unprecedented samples of heavy flavoured hadrons. The first results from LHCb have made a significant impact on the flavour physics landscape and have definitively proved the concept of a dedicated experiment in the forward region at a hadron collider. This document, which is a summary of a more detailed article, discusses the implications of these first measurements on classes of extensions to the Standard Model, bearing in mind the interplay with the results of searches for on-shell production of new particles at ATLAS and CMS. The physics potential of an upgrade to the LHCb detector, which would allow more than an order of magnitude more data to be collected, is emphasised.

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