

CERN Joint EP/PP Seminars

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Understanding flavour at the LHC

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ABSTRACT

Huge progress in flavour physics has been achieved by the two B-factories and the Tevatron experiments. This progress has, however, deepened the new physics flavour puzzle: If there is new physics at the TeV scale, why arent flavour changing neutral current processes enhanced by orders of magnitude compared to the standard model predictions? The forthcoming ATLAS and CMS experiments can potentially solve this puzzle. Perhaps even more surprisingly, these experiments can potentially lead to progress in understanding the standard model flavour puzzle: Why is there smallness and hierarchy in the flavour parameters? Thus, a rich and informative flavour program is awaiting us not only in the flavour-dedicated LHCb experiment, but also in the high-pT ATLAS and CMS experiments.