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Prospects for B Physics at the LHC

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The LHC is not only a machine for the high energy frontier but also a super b-factory. I will review the theoretical background how b-physics, i.e. flavour physics in general, can help to detect and explore new physics in a complementary way compared to direct searches. Discuss the challenges of b-physics at an hadron collider and how the experiments deal with it. Expected results with first data and long term perspective are also presented.