

Department of Physics

Particle Physics

The Denys Wilkinson Building, Keble Road, Oxford OX1 3RH



Experimental Particle Physics Seminar

at 2.15 pm

Dennis Sciama Lecture Theatre

Tuesday 12th November 2019

Dr Federico Betti
Universita di Bologna

The discovery of CP violation in charm

Abstract

The existence of CP violation in the decays of strange and beauty mesons has been well established by various measurements. Recently, CP violation in the decays of charmed particles has been observed by the LHCb collaboration. In this seminar, the observation of CP violation with $D^0 \rightarrow KK$ and $D^0 \rightarrow \pi\pi$ decays, performed using the full data set collected by LHCb so far, will be presented. In addition, prospects for ongoing and future measurements of CP asymmetries in the charm sector will be given.