2017 Meeting of the APS Division of Particles and Fields (DPF 2017)



Contribution ID: 486 Type: Presentation

CP violation measurements in b hadrons at LHCb

Thursday, 3 August 2017 11:57 (18 minutes)

LHCb has been collecting the world's largest sample of beauty hadrons available to date. This sample has been used to measure different sources of CP violation and search for beyond-the-standard-model physics. We present a selection of measurements performed by LHCb using the full Run 1 dataset and in some cases part of the Run-2 dataset, notably including: the measurements of the semileptonic asymmetries, Asls and Asld; the measurements of the CP-violating phase phi_s using Bs->J/psi KK (including KK masses above the phi resonance) and Bs->J/psi pipi decays, and that of the phase phi_d using Bd->J/psi KS decays; the measurement of the gamma angle of unitarity triangle via a number of decay modes; the measurement of CP violation in two-body B decays; and the search for CP violation using b-baryon decays. An outlook of upcoming measurements will also be given

Primary author: Dr GERSABECK, Marco (The University of Manchester)

Presenter: Ms VIEITES DIAZ, Maria (Universidade de Santiago de Compostela)

Session Classification: Quark and Lepton Flavor

Track Classification: Quark and Lepton Flavor