

Heavy Flavour Physics with ATLAS

Monday, 24 August 2015 14:55 (25 minutes)

The large amount of Heavy Flavour data collected by the ATLAS experiment is potentially sensitive to New Physics, which may be found in the mixing of B meson states, or through processes that are naturally suppressed in the Standard Model. We present the most recent results on the measurement of the decay of the Bs into J/psi phi based on full data collected in LHC Run-1 and with updated flavour tagging improving the accuracy in the CP-violating phase ϕ_s . We also discuss the measurement of the decay time difference in the Bd system and the most recent results on the search for the rare decay Bs (B0) $\rightarrow \mu^+\mu^-$ as well as results on the angular distribution parameters describing the decay $B_d \rightarrow K^*\mu^+\mu^- \rightarrow K\pi\mu^+\mu^-$.

Primary author: PADILLA ARANDA, Cristobal (IFAE-Barcelona (ES))

Presenter: EIGEN, Gerald (University of Bergen (NO))

Session Classification: Flavor Violation

Track Classification: Flavor Violation Theory and Experiment