

ATLAS measurements of CP Violation and Rare decays processes with Beauty mesons

Content

The ATLAS experiment has performed accurate measurements of mixing and CP violation in the neutral B mesons, and also of rare neutral B-meson decays proceeding via electroweak FCNC-suppressed processes. This talk will focus on the latest results from ATLAS, such as rate measurements of $B^0_s \rightarrow \mu\mu$ and $B^0 \rightarrow \mu\mu$ decays; and CP violation in $B^0_s \rightarrow J/\psi\phi$ decays. In the latter, the Standard Model predicts the CP violating mixing phase, ϕ_s , to be very small and its SM value is very well constrained, while in many new physics models large ϕ_s values are expected. Latest measurements of ϕ_s and several other parameters describing the $B^0_s \rightarrow J/\psi\phi$ decays will be reported.

Summary

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