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## **ATLAS measurements of CP violation and rare decay processes with beauty mesons**

The ATLAS experiment has performed measurements of B-meson rare decays proceeding via suppressed electroweak flavour changing neutral currents, and of mixing and CP violation in the neutral B meson systems. This talk will focus on the latest results from the ATLAS collaboration, in particular for rare processes  $B^0 \rightarrow \mu^+ \mu^-$  and  $B^0 \rightarrow \mu^+ \mu^- \gamma$ , and CP violation in the  $B^0 \rightarrow \mu^+ \mu^-$  decays. In the latter, the Standard Model predicts the CP violating mixing phase,  $\arg(\lambda)$ , to be very small and its SM value is very well constrained, while in many new physics models large  $\arg(\lambda)$  values are expected. Latest measurements of  $\arg(\lambda)$  and several other parameters describing the  $B^0 \rightarrow \mu^+ \mu^- \gamma$  decays will be reported.

**Primary author:** XU, Yue

**Presenter:** XU, Yue

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