

# Measurements of B mesons mixing phases at LHCb

*Saturday 20 July 2024 18:00 (15 minutes)*

Measuring the mixing phases of the B0 and Bs mesons is very important to validate the CP violation paradigm of the Standard Model and to search for new physics beyond it. Golden modes to measure these quantities are those governed by tree-level  $b \rightarrow c\bar{c}q$  transitions, that allow precise and theoretically clean determinations to be performed. Besides, measuring the mixing phases with modes receiving major contributions from penguin diagrams open the possibility to reveal new physics appearing in the loops. In this presentation we show the most recent measurements of B0 and Bs mixing phases at LHCb.

## Alternate track

1. Strong Interactions and Hadron Physics

## I read the instructions above

Yes

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