

# Muon opposite side tagging in $B_s \rightarrow J/\psi + \phi$

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Complex phase in the CKM matrix describing quark mixing causes CP violation and can be studied in the decay  $B_s^0 \rightarrow J/\psi + \phi$ . The determination of the initial flavour of neutral  $B$  mesons can be inferred using information from the  $B$  meson containing other pair-produced b-quark, referred as opposite-side tagging. To study and calibrate the opposite-side tagging method, decays  $B^\pm \rightarrow J/\psi + K^\pm$  are used. This presentation will talk about muon-based tagging.

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