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## Prospects for CP violation in $B^0_s \rightarrow J/\psi \phi$ from first LHCb data

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The determination of the CP-violating phase in  $B^0_s \rightarrow J/\psi \phi$  decays is one of the key goals of the LHCb experiment. Its value is predicted to be very small in the Standard Model but can be significantly enhanced in many models of New Physics. The steps towards a precise determination of this phase with a flavour-tagged, time-dependent, angular analysis of the decay  $B^0_s \rightarrow J/\psi \phi$  will be reviewed and first studies performed with data collected at LHC in pp collisions at 7 TeV center-of-mass energy will be presented. Prospects will also be discussed for measurements of other CP-violating observables in the  $B^0_s$  sector.

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