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## **Measurement of the CP violation in $B_s \rightarrow J/\psi f_1$ decays in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**

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In the Standard Model of particle physics, CP violation arises due to a single complex phase in the Cabibbo–Kobayashi–Maskawa (CKM) quark mixing matrix. Precise measurements of the CKM parameters therefore constrain the Standard Model, and may reveal new physics effects. The measurement of the time-dependent decay rates of  $B_s \rightarrow J/\psi f_1$  provides a theoretically clean method for extracting CP-violating weak mixing phase  $\phi_s$ . This poster will present the most recent results from ATLAS on the CP-violating mixing phase  $\phi_s$  and on several other parameters describing the  $B_s$  meson system.

**Primary author(s)** : MESHKOV, Oleg (Lomonosov MSU, P.N. Lebedev Physical Institute); COLLABORATION, ATLAS

**Presenter(s)** : MESHKOV, Oleg (Lomonosov MSU, P.N. Lebedev Physical Institute)

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