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 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics [Open Access](#)
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 Observation of the $\Lambda_b^0 \rightarrow j/\psi \Lambda \phi$ decay in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ (Article) [\(Open Access\)](#)

 Sirunyan, A.M.^a, Tumasyan, A.^a, Adam, W.^b, Ambrogio, F.^b, Bergauer, T.^b, Dragicevic, M.^b, Erö, J.^b, Escalante Del Valle, A.^b, Flechl, M.^b, Frühwirth, R.^b, Jeitler, M.^b, Krammer, N.^b, Krätschmer, I.^b, Liko, D.^b, Madlener, T.^b, Mikulec, I.^b, Rad, N.^b, Schieck, J.^b, Schöfbeck, R.^b, Spanring, M.^b, Waltenberger, W.^b,
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Abstract

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The observation of the $\Lambda_b^0 \rightarrow j/\psi \Lambda \phi$ decay is reported using proton-proton collision data collected at $\sqrt{s}=13\text{TeV}$ by the CMS experiment at the LHC in 2018, corresponding to an integrated luminosity of 60fb^{-1} . The ratio of the branching fractions $B(\Lambda_b^0 \rightarrow j/\psi \Lambda \phi)/B(\Lambda_b^0 \rightarrow \psi(2S) \Lambda)$ is measured to be $(8.26 \pm 0.90(\text{stat}) \pm 0.68(\text{syst}) \pm 0.11(\text{B})) \times 10^{-2}$, where the first uncertainty is statistical, the second is systematic, and the last uncertainty reflects the uncertainties in the world-average branching fractions of ϕ and $\psi(2S)$ decays to the reconstructed final states. © 2020 The Author

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Weston Havens Foundation			Sirunyan, A.M. , Tumasyan, A. , Adam, W. (2020) <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i>
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Rochester Academy of Science		RAS	Measurement of the Λ_b^0 lifetime in pp collisions at $\sqrt{s}=7$ TeV
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Funding text #2

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