

Publications by T. Bowcock

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LHCb

Preprints (10)

- 1) R. Aaij *et al.*, “Search for the doubly heavy baryons Ξ_{bc}^0 and Ω_{bc}^0 decaying to $\Lambda_c^+\pi^-$ and $\Xi_c^+\pi^-$,” *arXiv:2104.04759*, 4 2021
- 2) R. Aaij *et al.*, “Precise determination of the B_s^0 - \bar{B}_s^0 oscillation frequency,” *arXiv:2104.04421*, 4 2021
- 3) R. Aaij *et al.*, “Test of lepton universality in beauty-quark decays,” *arXiv:2103.11769*
- 4) R. Aaij *et al.*, “Search for CP violation in $D_{(s)}^+ \rightarrow h^+\pi^0$ and $D_{(s)}^+ \rightarrow h^+\eta$ decays,” *arXiv:2103.11058*
- 5) R. Aaij *et al.*, “Measurement of prompt-production cross-section ratio $\sigma(\chi_{c2})/\sigma(\chi_{c1})$ in $p\text{Pb}$ collisions at $\sqrt{s_{NN}} = 8.16 \text{ TeV}$,” *arXiv:2103.07349*
- 6) R. Aaij *et al.*, “Precise measurement of the f_s/f_d ratio of fragmentation fractions and of B_s^0 decay branching fractions,” *arXiv:2103.06810*
- 7) R. Aaij *et al.*, “Observation of new resonances decaying to $J/\psi K^+$ and $J/\psi\phi$,” *arXiv:2103.01803*
- 8) R. Aaij *et al.*, “Evidence of a J/ψ structure and observation of excited $^-$ states in the $^-_b \rightarrow J/\psi K^-$ decay,” *arXiv:2012.10380*
- 9) R. Aaij *et al.*, “Searches for 25 rare and forbidden decays of D^+ and D_s^+ mesons,” *arXiv:2011.00217*
- 10) R. Aaij *et al.*, “Observation of new excited B_s^0 states,” *arXiv:2010.15931*

Refereed Journal Papers (558)

- 1) R. Aaij *et al.*, “Angular analysis of the $B^+ \rightarrow K^{*+}\mu^+\mu^-$ decay,” *Phys. Rev. Lett.*, vol. 126, no. 9, p. 091802, 2021
- 2) R. Aaij *et al.*, “Measurement of CP violation in the decay $B^+ \rightarrow K^+\pi^0$,” *Phys. Rev. Lett.*, vol. 126, no. 9, p. 091802, 2021
- 3) R. Aaij *et al.*, “Measurement of CP observables in $B^\pm \rightarrow D^{(*)}K^\pm$ and $B^\pm \rightarrow D^{(*)}\pi^\pm$ decays using two-body D final states,” *JHEP*, vol. 04, p. 081, 2021
- 4) R. Aaij *et al.*, “First observation of the decay $B_s^0 \rightarrow K^-\mu^+\nu_\mu$ and measurement of $|V_{ub}|/|V_{cb}|$,” *Phys. Rev. Lett.*, vol. 126, no. 8, p. 081804, 2021
- 5) R. Aaij *et al.*, “Observation of a new Ξ_b^0 state,” *Phys. Rev. D*, vol. 103, no. 1, p. 012004, 2021
- 6) R. Aaij *et al.*, “Measurement of the relative branching fractions of $B^+ \rightarrow h^+h^+h^-$ decays,” *Phys. Rev. D*, vol. 102, p. 112010, 2020
- 7) R. Aaij *et al.*, “Observation of CP violation in two-body $B_{(s)}^0$ -meson decays to charged pions and kaons,” *JHEP*, vol. 03, p. 075, 2021
- 8) R. Aaij *et al.*, “Search for long-lived particles decaying to $e^\pm\mu^\mp\nu$,” *Eur. Phys. J. C*, vol. 81, no. 3, p. 261, 2021
- 9) R. Aaij *et al.*, “Observation of the $^-_b \rightarrow ^+_c K^+K^-\pi^-$ decay,” *Phys. Lett. B*, vol. 815, p. 136172, 2021
- 10) R. Aaij *et al.*, “Observation of the $B_s^0 \rightarrow D^{*\pm}D^\mp$ decay,” *JHEP*, vol. 03, p. 099, 2021
- 11) R. Aaij *et al.*, “Study of $B_s^0 \rightarrow J/\psi\pi^+\pi^-K^+K^-$ decays,” *JHEP*, vol. 02, p. 024, 2021
- 12) R. Aaij *et al.*, “Search for heavy neutral leptons in $W^+ \rightarrow \mu^+\mu^\pm$ jet decays,” *Eur. Phys. J. C*, vol. 81, no. 3, p. 248, 2021
- 13) R. Aaij *et al.*, “Search for the rare decay $B^0 \rightarrow J/\psi\phi$,” *Chin. Phys. C*, vol. 45, no. 4, p. 043001, 2021
- 14) R. Aaij *et al.*, “Measurement of the CKM angle γ and B_s^0 - \bar{B}_s^0 mixing frequency with $B_s^0 \rightarrow D_s^\mp h^\pm\pi^\pm\pi^\mp$ decays,” *JHEP*, vol. 03, p. 137, 2021
- 15) R. Aaij *et al.*, “Observation of a new excited D_s^+ meson in $B^0 \rightarrow D^+D^-K^+\pi^-$ decays,” *Phys. Rev. Lett.*, vol. 126, no. 12, p. 122002, 2021
- 16) R. Aaij *et al.*, “Measurement of the branching fraction of the $B^0 \rightarrow D_s^+\pi^-$ decay,” *Eur. Phys. J. C*, vol. 81, no. 4, p. 314, 2021
- 17) R. Aaij *et al.*, “Measurement of differential $b\bar{b}$ - and $c\bar{c}$ -dijet cross-sections in the forward region of pp collisions at $\sqrt{s} = 13 \text{ TeV}$,” *JHEP*, vol. 02, p. 023, 2021
- 18) R. Aaij *et al.*, “Measurement of the CKM angle γ in $B^\pm \rightarrow DK^\pm$ and $B^\pm \rightarrow D\pi^\pm$ decays with $D \rightarrow K_S^0 h^+h^-$,” *JHEP*, vol. 02, p. 169, 2021
- 19) R. Aaij *et al.*, “Strong constraints on the $b \rightarrow s\gamma$ photon polarisation from $B^0 \rightarrow K^{*0}e^+e^-$ decays,” *JHEP*, vol. 12, p. 081, 2020
- 20) R. Aaij *et al.*, “Observation of multiplicity-dependent prompt $\chi_{c1}(3872)$ and $\psi(2S)$ production in pp collisions,” 9 2020
- 21) R. Aaij *et al.*, “Search for the doubly heavy Ξ_{bc}^0 baryon via decays to D^0pK^- ,” *JHEP*, vol. 11, p. 095, 2020
- 22) R. Aaij *et al.*, “Amplitude analysis of the $B^+ \rightarrow D^+D^-K^+$ decay,” *Phys. Rev. D*, vol. 102, p. 112003, 2020
- 23) R. Aaij *et al.*, “A model-independent study of resonant structure in $B^+ \rightarrow D^+D^-K^+$ decays,” *Phys. Rev. Lett.*, vol. 125, p. 242001, 2020
- 24) R. Aaij *et al.*, “First branching fraction measurement of the suppressed decay $\Xi_c^0 \rightarrow \pi^-\Lambda_c^+$,” *Phys. Rev. D*, vol. 102, no. 7, p. 071101, 2020
- 25) R. Aaij *et al.*, “First observation of the decay $\Lambda_b^0 \rightarrow \eta_c(1S)pK^-$,” *Phys. Rev. D*, vol. 102, no. 11, p. 112012, 2020
- 26) R. Aaij *et al.*, “Observation of Enhanced Double Parton Scattering in Proton-Lead Collisions at $\sqrt{s_{NN}} = 8.16 \text{ TeV}$,” *Phys. Rev. Lett.*, vol. 125, no. 21, p. 212001, 2020
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- 29) R. Aaij *et al.*, “Observation of structure in the J/ψ -pair mass spectrum,” *Sci. Bull.*, vol. 65, no. 23, pp. 1983–1993, 2020
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- 31) R. Aaij *et al.*, “Study of the lineshape of the $\chi_{c1}(3872)$ state,” *Phys. Rev. D*, vol. 102, no. 9, p. 092005, 2020
- 32) R. Aaij *et al.*, “Study of the $\psi_2(3823)$ and $\chi_{c1}(3872)$ states in $B^+ \rightarrow (J/\psi\pi^+\pi^-)K^+$ decays,” *JHEP*, vol. 08, p. 123, 2020
- 33) R. Aaij *et al.*, “Measurement of branching fraction ratios for $B^+ \rightarrow D^{*+}D^-K^+$, $B^+ \rightarrow D^{*-}D^+K^+$, and $B^0 \rightarrow D^{*-}D^0K^+$ decays,” *JHEP*, vol. 12, p. 139, 2020
- 34) R. Aaij *et al.*, “Measurement of the $\Lambda_b^0 \rightarrow J/\psi\Lambda$ angular distribution and the Λ_b^0 polarisation in pp collisions,” *JHEP*, vol. 06, p. 110, 2020
- 35) R. Aaij *et al.*, “Precision measurement of the B_c^+ meson mass,” *JHEP*, vol. 07, p. 123, 2020
- 36) R. Aaij *et al.*, “Observation of New Ξ_c^0 Baryons Decaying to $\Lambda_c^+K^-$,” *Phys. Rev. Lett.*, vol. 124, no. 22, p. 222001, 2020
- 37) R. Aaij *et al.*, “Measurement of the shape of the $B_s^0 \rightarrow D_s^{*-}\mu^+\nu_\mu$ differential decay rate,” *JHEP*, vol. 12, p. 144, 2020

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- 43) R. Aaij *et al.*, “Observation of a new baryon state in the $\Lambda_b^0 \pi^+ \pi^-$ mass spectrum,” *JHEP*, vol. 06, p. 136, 2020
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