

1 Supplementary material for LHCb-PAPER-2020-035

2 This appendix contains supplementary material that will be posted on the public CDS record
3 but will not appear in the paper.

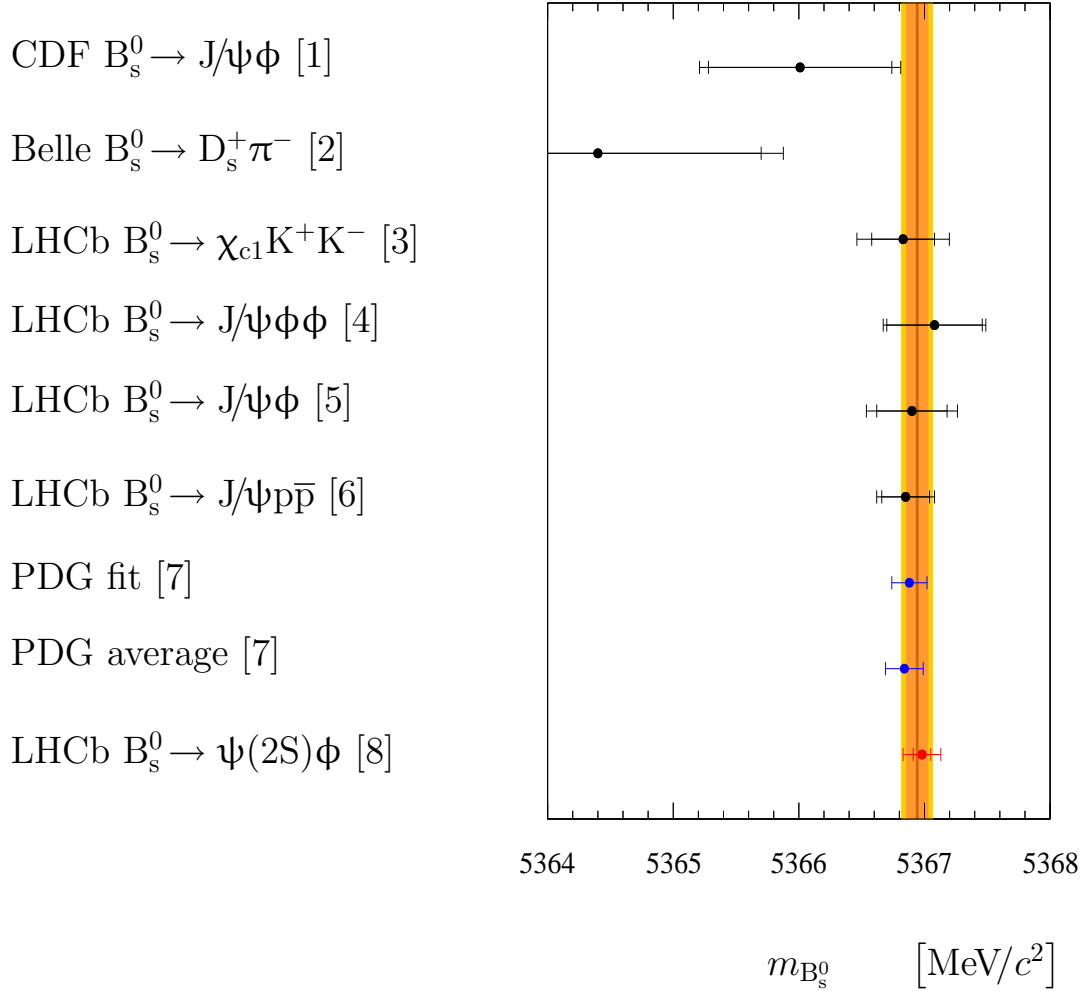


Figure S1: Measurements of the mass of the B_s^0 meson. The inner error bars indicate the statistical uncertainty, and the outer error bars correspond to quadratic sum of statistic and systematic uncertainties. The band represents the value and the uncertainty on the average of LHCb measurements.

Table S1: Summary of B_s^0 mass measurements.

Mode	B_s^0 mass [MeV/c^2]	Reference
CDF $B_s^0 \rightarrow J/\psi\phi$	$5366.01 \pm 0.73 \pm 0.33$	[1]
Belle $B_s^0 \rightarrow D_s^+\pi^-$	$5364.40 \pm 1.30 \pm 0.70$	[2]
LHCb $B_s^0 \rightarrow \chi_{c1}K^+K^-$	$5366.83 \pm 0.25 \pm 0.27$	[3]
LHCb $B_s^0 \rightarrow J/\psi\phi\phi$	$5367.08 \pm 0.38 \pm 0.15$	[4]
LHCb $B_s^0 \rightarrow J/\psi\phi$	$5366.90 \pm 0.28 \pm 0.23$	[5]
LHCb $B_s^0 \rightarrow J/\psi p\bar{p}$	$5366.85 \pm 0.19 \pm 0.13$	[6]
PDG fit	5366.88 ± 0.14	[7]
PDG average	5366.84 ± 0.15	[7]
LHCb $B_s^0 \rightarrow \psi(2S)\phi$	$5366.98 \pm 0.07 \pm 0.13$	[8]
LHCb average	$5366.94 \pm 0.08 \pm 0.09$	[8]

4 References

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