

$\Xi_b(6227)^0$ $J^P = ??$

Status: ***

 $\Xi_b(6227)^0$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$6226.8^{+1.4}_{-1.5} \pm 0.6$	1,2 AAIJ	21	LHCB pp at 7, 8, 13 TeV

¹ AAIJ 21 measures $m(\Xi_b(6227)^0) - m(\Xi_b^-) = 429.8^{+1.4}_{-1.5} \pm 0.3$ MeV. We have adjusted the measurement to our best value of $m(\Xi_b^-) = 5797.0 \pm 0.6$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

² Uses $\Xi_b^- \pi^+$ decays.

 $\Xi_b(6227)^0$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$18.6^{+5.0}_{-4.1} \pm 1.4$	¹ AAIJ	21	LHCB pp at 7, 8, 13 TeV

¹ Uses $\Xi_b^- \pi^+$ decays.

 $\Xi_b(6227)^0$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \Xi_b^- \pi^+ \times B(b \rightarrow \Xi_b(6227)^0)/B(b \rightarrow \Xi_b^-)$	$(4.5 \pm 0.9) \%$

 $\Xi_b(6227)^0$ BRANCHING RATIOS

VALUE (%)	DOCUMENT ID	TECN	COMMENT	Γ_1/Γ
$4.5 \pm 0.8 \pm 0.4$	AAIJ	21	LHCB pp at 7, 8, 13 TeV	

 $\Xi_b(6227)^0$ REFERENCES

AAIJ 21 PR D103 012004 R. Aaij et al. (LHCb Collab.)