

$\Xi_b(6227)^0$

$J^P = \text{?}$

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

$\Gamma(\Xi_b^- \pi^+ \times B(b \rightarrow \Xi_b(6227)^0)/B(b \rightarrow \Xi_b^-))/\Gamma_{\text{total}}$				Γ_1/Γ
VALUE (%)	DOCUMENT	ID	TECN	COMMENT
4.5±0.8±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.)
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