

$\Xi_b(6087)^0$ $I(J^P) = \frac{1}{2}(??)$ Status: *** $\Xi_b(6087)^0$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
6087.0 ± 0.2 ± 0.4	1,2 AAIJ	23AU LHCB	pp at 7, 8, 13 TeV
¹ Observed in $\Xi_b^0 \pi^+ \pi^-$ channel with $\Xi_b^0 \rightarrow \Xi_c^+ \pi^-$ and $\Xi_b^0 \rightarrow \Xi_c^+ \pi^- \pi^+ \pi^-$ and $\Xi_c^+ \rightarrow p K^- \pi^+$. Measured as mass difference, listed separately. ² AAIJ 23AU measures $m(\Xi_b(6087)^0) - m(\Xi_b^0) - 2m(\pi^\pm) = 16.20 \pm 0.20 \pm 0.06$ MeV. We have adjusted the measurement to our best values of $m(\Xi_b^0) = 5791.7 \pm 0.4$ MeV, $m(\pi^\pm) = 139.57039 \pm 0.00018$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.			

 $\Xi_b(6087)^0$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2.43 ± 0.51 ± 0.10	¹ AAIJ	23AU LHCB	pp at 7, 8, 13 TeV
¹ Observed in $\Xi_b^0 \pi^+ \pi^-$ channel with $\Xi_b^0 \rightarrow \Xi_c^+ \pi^-$ and $\Xi_b^0 \rightarrow \Xi_c^+ \pi^- \pi^+ \pi^-$ and $\Xi_c^+ \rightarrow p K^- \pi^+$			

 $\Xi_b(6087)^0$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \Xi_b^0 \pi^+ \pi^-$	seen

 $\Xi_b(6087)^0$ BRANCHING RATIOS

$\Gamma(\Xi_b^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$	Γ_1/Γ		
VALUE	DOCUMENT ID	TECN	COMMENT
seen	AAIJ	23AU LHCB	pp at 7, 8, 13 TeV

 $\Xi_b(6087)^0$ REFERENCES

AAIJ	23AU PRL 131 171901	R. Aaij <i>et al.</i>	(LHCb Collab.)
------	---------------------	-----------------------	----------------