

$\Xi_b(6095)^0$  $I(J^P) = \frac{1}{2}(\frac{3}{2}^-)$  Status: \*\*\*  
 $J, P$  need confirmation. $\Xi_b(6095)^0$  MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>6095.3 ± 0.2 ± 0.5</b>	1,2 AAIJ	23AU LHCB	$pp$ at 7, 8, 13 TeV
<p><sup>1</sup> Observed in <math>\Xi_b^0 \pi^+ \pi^-</math> channel with <math>\Xi_b^0 \rightarrow \Xi_c^+ \pi^-</math> and <math>\Xi_b^0 \rightarrow \Xi_c^+ \pi^- \pi^+ \pi^-</math> and <math>\Xi_c^+ \rightarrow p K^- \pi^+</math>. Measured as mass difference, listed separately.</p> <p><sup>2</sup> AAIJ 23AU measures <math>m(\Xi_b(6095)^0) - m(\Xi_b^0) - 2m(\pi^\pm) = 24.32 \pm 0.15 \pm 0.03</math> MeV. We have adjusted the measurement to our best values of <math>m(\Xi_b^0) = 5791.9 \pm 0.5</math> MeV, <math>m(\pi^\pm) = 139.57039 \pm 0.00018</math> MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.</p>			

 $\Xi_b(6095)^0$  WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>0.50 ± 0.33 ± 0.11</b>	<sup>1</sup> AAIJ	23AU LHCB	$pp$ at 7, 8, 13 TeV
<p><sup>1</sup> Observed in <math>\Xi_b^0 \pi^+ \pi^-</math> channel with <math>\Xi_b^0 \rightarrow \Xi_c^+ \pi^-</math> and <math>\Xi_b^0 \rightarrow \Xi_c^+ \pi^- \pi^+ \pi^-</math> and <math>\Xi_c^+ \rightarrow p K^- \pi^+</math></p>			

 $\Xi_b(6095)^0$  DECAY MODES

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

 $\Xi_b(6095)^0$  BRANCHING RATIOS

$\Gamma(\Xi_b^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	COMMENT	$\Gamma_1/\Gamma$
<b>seen</b>	AAIJ	23AU LHCB	$pp$ at 7, 8, 13 TeV	

 $\Xi_b(6095)^0$  REFERENCES

AAIJ	23AU PRL 131 171901	R. Aaij et al.	(LHCb Collab.)
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