$\Lambda_b(6146)^0$

$J^P = \frac{3}{2}^+$ Status: $\ast\ast\ast$

Quantum numbers are based on quark model expectations.

$\Lambda_b(6146)^0$ MASS

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VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
6146.2 ±0.4 OUR AVERAGE				
6146.5 ±2.1 ±0.2	[1] SIRUNYAN	20K	CMS	pp at 13 TeV
6146.17±0.33±0.27	[2] AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

[1] SIRUNYAN 20K measures $m(\Lambda_b(6146)^0) - m(\Lambda_b^0) = 526.9 \pm 1.9 \pm 0.8$ MeV. We have adjusted the measurement to our best value of $m(\Lambda_b^0) = 5619.60 \pm 0.17$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

[2] Observed in $\Lambda_b^0 \pi^+ \pi^-$ mode.

$m_{\Lambda_b(6146)^0} - m_{\Lambda_b^0}$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
526.55±0.33±0.10	[1] AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

[1] Observed in $\Lambda_b^0 \pi^+ \pi^-$ mode.

$\Lambda_b(6146)^0$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
2.9±1.3±0.3	[1] AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

[1] Observed in $\Lambda_b^0 \pi^+ \pi^-$ mode.

$\Lambda_b(6146)^0$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Lambda_b^0 \pi^+ \pi^-$	seen

$\Lambda_b(6146)^0$ BRANCHING RATIOS

$\Gamma(\Lambda_b^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$ $\hfill \Gamma_1/\Gamma$

VALUE	DOCUMENT ID		TECN	COMMENT
seen	SIRUNYAN	20K	LHCB	pp at 13 TeV
seen	AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

$\Lambda_b(6146)^0$ REFERENCES

SIRUNYAN	20K	PL B803 135345	A.M. Sirunyan *et al.*	(CMS Collab.)
AAIJ	19AJ	PRL 123 152001	R. Aaij *et al.*	(LHCb Collab.)