$\Lambda_b(6152)^0$

$J^P = \frac{5}{2}^+$ Status: ***

Quantum numbers are based on quark model expectations.

$\Lambda_b(6152)^0$ MASS

$\Lambda_b(6152)^0$ MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
6152.5 ±0.4 OUR AVERAGE				
6152.7 ±1.2 ±0.2	[1] SIRUNYAN	20K	CMS	pp at 13 TeV
6152.51±0.26±0.27	[2] AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

[1] SIRUNYAN 20K measures $m(\Lambda_b(6152)^0) - m(\Lambda_b^0) = 533.1 \pm 1.1 \pm 0.4$ 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.

$m_{\Lambda_b(6152)^0} - m_{\Lambda_b^0}$

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
532.89±0.26±0.10	[1] AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

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

$m_{\Lambda_b(6152)^0} - m_{\Lambda_b(6146)^0}$

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
6.34±0.32±0.02	AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

$\Lambda_b(6152)^0$ WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
2.1±0.8±0.3	[1] AAIJ	19AJ	LHCB	pp at 7, 8, 13 TeV

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

$\Lambda_b(6152)^0$ DECAY MODES

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

$\Lambda_b(6152)^0$ BRANCHING RATIOS

$\Gamma(\Lambda_b^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$ Γ_1/Γ

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

$\Lambda_b(6152)^0$ REFERENCES

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