$\Lambda_b(5912)^0$

$J^P = \frac{1}{2}^-$ Status: $\ast\ast\ast$

Quantum numbers are based on quark model expectations.

$\Lambda_b(5912)^0$ MASS

VALUE (MeV)		DOCUMENT ID	TECN	COMMENT
5912.0±0.1±0.6	[1,2] AAIJ		12AL LHCB	pp at 7 TeV

[1] Observed in $\Lambda_b(5912)^0 \to \Lambda_b^0 \pi^+ \pi^-$ decays with 17.6 ± 4.8 candidates with a significance of 5.2 sigma.

[2] AAIJ 12AL measures $m(\Lambda_b(5912)^0) - m(\Lambda_b^0) = 292.60 \pm 0.12 \pm 0.04$ MeV. We have adjusted the measurement to our best value of $m(\Lambda_b^0) = 5619.4 \pm 0.6$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

$\Lambda_b(5912)^0$ WIDTH

VALUE (MeV)	CL%	DOCUMENT ID	TECN	COMMENT
<0.66	90	AAIJ	12AL LHCB	pp at 7 TeV

$\Lambda_b(5912)^0$ DECAY MODES

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

$\Lambda_b(5912)^0$ BRANCHING RATIOS

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

VALUE	DOCUMENT ID	TECN	COMMENT
seen	AAIJ	12AL LHCB	pp at 7 TeV

$\Lambda_b(5912)^0$ REFERENCES

AAIJ   12AL PRL 109 172003   R. Aaij *et al.*   (LHCb Collab.)