$\Lambda_b(5912)^0$

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

Quantum numbers are based on quark model expectations.

$\Lambda_b(5912)^0$ MASS

VALUE (MeV)		*DOCUMENT ID*		*TECN*	*COMMENT*
5912.20±0.13±0.17	[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 $m(\Lambda_b^0) = 5619.60 \pm 0.17$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

$\Lambda_b(5912)^0$ 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.)