$\Xi_b(5945)^0$

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

Quantum numbers are based on quark model expectations.

$\Xi_b(5945)^0$ MASS

VALUE (MeV)	*DOCUMENT ID*	*TECN*	*COMMENT*
5949.3±0.8±0.9	[1] CHATRCHYAN 12S	CMS	pp at 7 TeV, 5.3 fb^{-1}

[1] CHATRCHYAN 12S measures $m(\Xi_b(5945)^0) - m(\Xi_b^-) - m(\pi^+) = 14.84 \pm 0.74 \pm 0.28$ MeV. We have adjusted the measurement to our best values of $m(\Xi_b^-) = 5794.9 \pm 0.9$ MeV, $m(\pi^+) = 139.57018 \pm 0.00035$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

$\Xi_b(5945)^0$ WIDTH

VALUE (MeV)	*DOCUMENT ID*	*TECN*	*COMMENT*
2.1±1.7	[2] CHATRCHYAN 12S	CMS	pp at 7 TeV, 5.3 fb^{-1}

[2] Systematic uncertainty not evaluated.

$\Xi_b(5945)^0$ DECAY MODES

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

$\Xi_b(5945)^0$ BRANCHING RATIOS

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

VALUE	*DOCUMENT ID*	*TECN*	*COMMENT*
seen	CHATRCHYAN 12S	CMS	pp at 7 TeV, 5.3 fb^{-1}

$\Xi_b(5945)^0$ REFERENCES

CHATRCHYAN 12S PRL 108 252002 S. Chatrchyan *et al.* (CMS Collab.)