NODE=B199

$\Xi_b(6227)^0$

$J^P = ?^?$ Status: ***

$\Xi_b(6227)^0$ MASS

NODE=B199M

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
6226.8 $^{+1.4}_{-1.5}$ ± 0.6	[1,2] AAIJ	21	LHCB	pp at 7, 8, 13 TeV

NODE=B199M

NODE=B199M;LINKAGE=A

[1] AAIJ 21 measures $m(\Xi_b(6227)^0) - m(\Xi_b^-) = 429.8^{+1.4}_{-1.5} \pm 0.3$ MeV. We have adjusted the measurement to our best value of $m(\Xi_b^-) = 5797.0 \pm 0.6$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

NODE=B199M;LINKAGE=B

[2] Uses $\Xi_b^- \pi^+$ decays.

$\Xi_b(6227)^0$ WIDTH

NODE=B199W

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
18.6 $^{+5.0}_{-4.1}$ ± 1.4	[1] AAIJ	21	LHCB	pp at 7, 8, 13 TeV

NODE=B199W

NODE=B199W;LINKAGE=A

[1] Uses $\Xi_b^- \pi^+$ decays.

$\Xi_b(6227)^0$ DECAY MODES

NODE=B199215;NODE=B199

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Xi_b^- \pi^+ \times$ B($b \to$ $\Xi_b(6227)^0$)/B($b \to$ Ξ_b^-)	(4.5±0.9) %

DESIG=1

$\Xi_b(6227)^0$ BRANCHING RATIOS

NODE=B199220

$\Gamma(\Xi_b^- \pi^+ \times$ B($b \to \Xi_b(6227)^0$)/B($b \to \Xi_b^-$))/Γ_{total} **Γ_1/Γ**

NODE=B199R01

VALUE (%)	DOCUMENT ID		TECN	COMMENT
4.5±0.8±0.4	AAIJ	21	LHCB	pp at 7, 8, 13 TeV

NODE=B199R01

$\Xi_b(6227)^0$ REFERENCES

NODE=B199

AAIJ 21 PR D103 012004 R. Aaij *et al.* (LHCb Collab.)

REFID=60752