$\Xi_b^*(5955)^-$

$J^P = \frac{3}{2}^+$ Status: ✳✳✳

$\Xi_b^*(5955)^-$ MASS

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
5955.33±0.12±0.05	[1] AAIJ	15H	LHCB	pp at 7, 8 TeV

[1] Not independent of the mass difference measurement below. Observed in $\Xi_b^0 \pi^-$ channel with $\Xi_b^0 \to \Xi_c^+ \pi^-$ and $\Xi_c^+ \to pK^-\pi^+$.

$m_{\Xi_b^*(5955)^-} - m_{\Xi_b^0} - m_{\pi^-}$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
23.96±0.12±0.06	[2] AAIJ	15H	LHCB	pp at 7, 8 TeV

[2] Observed in $\Xi_b^0 \pi^-$ channel with $\Xi_b^0 \to \Xi_c^+ \pi^-$ and $\Xi_c^+ \to pK^-\pi^+$.

$\Xi_b^*(5955)^-$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
1.65±0.31±0.10	[3] AAIJ	15H	LHCB	pp at 7, 8 TeV

[3] Observed in $\Xi_b^0 \pi^-$ channel with $\Xi_b^0 \to \Xi_c^+ \pi^-$ and $\Xi_c^+ \to pK^-\pi^+$.

$\Xi_b^*(5955)^-$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Xi_b^0 \pi^- \times B(\overline{b} \to \Xi_b^*(5955)^-)/B(\overline{b} \to \Xi_b^0)$	(20.7 ± 3.5) %

$\Xi_b^*(5955)^-$ BRANCHING RATIOS

$\Gamma\left(\Xi_b^0 \pi^- \times B(\overline{b} \to \Xi_b^*(5955)^-)/B(\overline{b} \to \Xi_b^0)\right)/\Gamma_{total}$ Γ_1/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
0.207±0.032±0.015	[4] AAIJ	15H	LHCB	pp at 7, 8 TeV

[4] Observed in $\Xi_b^0 \pi^-$ channel with $\Xi_b^0 \to \Xi_c^+ \pi^-$ and $\Xi_c^+ \to pK^-\pi^+$.

$\Xi_b^*(5955)^-$ REFERENCES

AAIJ	15H	PRL 114 062004	R. Aaij *et al.*	(LHCb Collab.)