$\Sigma_b(6097)^+$

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

$\Sigma_b(6097)^+$ MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
6095.8±1.7±0.4	[1] AAIJ	19A	LHCB	pp at 7, 8 TeV

[1] Measured using fully reconstructed $\Lambda_b^0 \to \Lambda_c^+ \pi^-$ and $\Lambda_c^+ \to p K^- \pi^+$ decays.

$m_{\Sigma_b(6097)^\pm} - m_{\Sigma_b(6097)^-}$

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
-2.2 +-2.4 +-0.3 MeV	[1] AAIJ	19A	LHCB	pp at 7, 8 TeV

[1] Measured using fully reconstructed $\Lambda_b^0 \to \Lambda_c^+ \pi^-$ and $\Lambda_c^+ \to p K^- \pi^+$ decays.

$\Sigma_b(6097)^+$ WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
31.0±5.5±0.7	[1] AAIJ	19A	LHCB	pp at 7, 8 TeV

[1] Measured using fully reconstructed $\Lambda_b^0 \to \Lambda_c^+ \pi^-$ and $\Lambda_c^+ \to p K^- \pi^+$ decays.

$\Sigma_b(6097)^+$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Lambda_b \pi^+ \times$ B($b \to \Sigma_b(6097)^+$)	seen

$\Sigma_b(6097)^+$ BRANCHING RATIOS

$\Gamma(\Lambda_b \pi^+ \times$ B($b \to \Sigma_b(6097)^+$) $)/\Gamma_{\text{total}}$ **Γ_1/Γ**

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	AAIJ	19A	LHCB	pp at 7, 8 TeV

$\Sigma_b(6097)^+$ REFERENCES

AAIJ 19A PRL 122 012001 R. Aaij *et al.* (LHCb Collab.)