

$\Sigma_b(6097)^+$ $J^P = ??$

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 $\Lambda_b^0 \rightarrow \Lambda_c^+ \pi^-$ and $\Lambda_c^+ \rightarrow p K^- \pi^+$ decays.			

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

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 $\Lambda_b^0 \rightarrow \Lambda_c^+ \pi^-$ and $\Lambda_c^+ \rightarrow p K^- \pi^+$ 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 $\Lambda_b^0 \rightarrow \Lambda_c^+ \pi^-$ and $\Lambda_c^+ \rightarrow p K^- \pi^+$ decays.			

 $\Sigma_b(6097)^+$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \Lambda_b \pi^+ \times B(b \rightarrow \Sigma_b(6097)^+)$	seen

 $\Sigma_b(6097)^+$ BRANCHING RATIOS

$\Gamma(\Lambda_b \pi^+ \times B(b \rightarrow \Sigma_b(6097)^+))/\Gamma_{\text{total}}$	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.)