

$\Sigma_b(6097)^+$

$J^P = ?^?$

Status: \*\*\*

### $\Sigma_b(6097)^+$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>6095.8±1.7±0.4</b>	<sup>1</sup> AAIJ	19A	LHCb $p\bar{p}$ at 7, 8 TeV

<sup>1</sup> 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	<sup>1</sup> AAIJ	19A	LHCb $p\bar{p}$ at 7, 8 TeV

<sup>1</sup> 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
<b>31.0±5.5±0.7</b>	<sup>1</sup> AAIJ	19A	LHCb $p\bar{p}$ at 7, 8 TeV

<sup>1</sup> 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 ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad \Lambda_b \pi^+ \times \mathcal{B}(b \rightarrow \Sigma_b(6097)^+)$	seen

### $\Sigma_b(6097)^+$ BRANCHING RATIOS

$$\Gamma(\Lambda_b \pi^+ \times \mathcal{B}(b \rightarrow \Sigma_b(6097)^+)) / \Gamma_{\text{total}} \quad \Gamma_1 / \Gamma$$

VALUE	DOCUMENT ID	TECN	COMMENT
<b>seen</b>	AAIJ	19A	LHCb $p\bar{p}$ at 7, 8 TeV

### $\Sigma_b(6097)^+$ REFERENCES

AAIJ

19A PRL 122 012001

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(LHCb Collab.)