

$\Sigma_b(6097)^-$

$J^P = ?^?$

Status: \*\*\*

NODE=B182

$\Sigma_b(6097)^-$  MASS

NODE=B182M

| VALUE (MeV)                                                                                                                                   | DOCUMENT ID       | TECN     | COMMENT          |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|------------------|
| <b>6098.0±1.7±0.5</b>                                                                                                                         | <sup>1</sup> AAIJ | 19A LHCb | $pp$ 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. |                   |          |                  |

NODE=B182M

NODE=B182M;LINKAGE=A

$\Sigma_b(6097)^-$  WIDTH

NODE=B182W

| VALUE (MeV)                                                                                                                                   | DOCUMENT ID       | TECN     | COMMENT          |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|------------------|
| <b>28.9±4.2±0.9</b>                                                                                                                           | <sup>1</sup> AAIJ | 19A LHCb | $pp$ 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. |                   |          |                  |

NODE=B182W

NODE=B182W;LINKAGE=A

$\Sigma_b(6097)^-$  DECAY MODES

NODE=B182215;NODE=B182

| Mode                                                                      | Fraction ( $\Gamma_i/\Gamma$ ) |
|---------------------------------------------------------------------------|--------------------------------|
| $\Gamma_1 \quad \Lambda_b \pi^- \times B(b \rightarrow \Sigma_b(6097)^-)$ | seen                           |

DESIG=1

$\Sigma_b(6097)^-$  BRANCHING RATIOS

NODE=B182220

| $\Gamma(\Lambda_b \pi^- \times B(b \rightarrow \Sigma_b(6097)^-))/\Gamma_{\text{total}}$ |             |          | $\Gamma_1/\Gamma$ |
|------------------------------------------------------------------------------------------|-------------|----------|-------------------|
| VALUE                                                                                    | DOCUMENT ID | TECN     | COMMENT           |
| <b>seen</b>                                                                              | AAIJ        | 19A LHCb | $pp$ at 7, 8 TeV  |

NODE=B182R01  
NODE=B182R01

$\Sigma_b(6097)^-$  REFERENCES

NODE=B182

|      |     |                |                       |                |
|------|-----|----------------|-----------------------|----------------|
| AAIJ | 19A | PRL 122 012001 | R. Aaij <i>et al.</i> | (LHCb Collab.) |
|------|-----|----------------|-----------------------|----------------|

REFID=59550