



$J^P = ??$

Status: ***

$\Xi_b(6227)^0$ MASS

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|--------------------------------|-------------|------|---------------------------|
| $6226.8^{+1.4}_{-1.5} \pm 0.6$ | 1,2 AAIJ | 21 | LHCB pp at 7, 8, 13 TeV |

¹ AAIJ 21 measures $m(\Xi_b(6227)^0) - m(\Xi_b^-) = 429.8^{+1.4}_{-1.5} \pm 0.3$ MeV. We have adjusted the measurement to our best value of $m(\Xi_b^-) = 5797.0 \pm 0.6$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

² Uses $\Xi_b^- \pi^+$ decays.

$\Xi_b(6227)^0$ WIDTH

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|------------------------------|-------------------|------|---------------------------|
| $18.6^{+5.0}_{-4.1} \pm 1.4$ | ¹ AAIJ | 21 | LHCB pp at 7, 8, 13 TeV |

¹ Uses $\Xi_b^- \pi^+$ decays.

$\Xi_b(6227)^0$ DECAY MODES

| Mode | Fraction (Γ_i/Γ) |
|---|--------------------------------|
| $\Gamma_1 \quad \Xi_b^- \pi^+ \times B(b \rightarrow \Xi_b(6227)^0)/B(b \rightarrow \Xi_b^-)$ | $(4.5 \pm 0.9) \%$ |

$\Xi_b(6227)^0$ BRANCHING RATIOS

| VALUE (%) | DOCUMENT ID | TECN | COMMENT | Γ_1/Γ |
|-----------------------|-------------|------|---------------------------|-------------------|
| $4.5 \pm 0.8 \pm 0.4$ | AAIJ | 21 | LHCB pp at 7, 8, 13 TeV | |

$\Xi_b(6227)^0$ REFERENCES

AAIJ 21 PR D103 012004 R. Aaij *et al.* (LHCb Collab.)