

$\Omega_b(6316)^-$

$I(J^P) = ?(?^?)$ Status: ***
 I, J, P need confirmation.

 $\Omega_b(6316)^-$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
6315.6±0.3±0.5	¹ AAIJ	20T LHCB	pp at 7, 8, 13 TeV

¹ AAIJ 20T measures $m(\Omega_b(6316)^-) - m(\Xi_b^0) = 523.74 \pm 0.31 \pm 0.07$ MeV. We have adjusted the measurement to our best values of $m(\Xi_b^0) = 5791.9 \pm 0.5$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

 $\Omega_b(6316)^-$ WIDTH

VALUE (MeV)	CL%	DOCUMENT ID	TECN	COMMENT
<4.2	95	AAIJ	20T LHCB	pp at 7, 8, 13 TeV

 $\Omega_b(6316)^-$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \Xi_b^0 K^-$	seen

 $\Omega_b(6316)^-$ BRANCHING RATIOS

$\Gamma(\Xi_b^0 K^-)/\Gamma_{\text{total}}$	Γ_1/Γ		
VALUE	DOCUMENT ID	TECN	COMMENT
seen	¹ AAIJ	20T LHCB	pp at 7, 8, 13 TeV

¹ AAIJ 20T establishes the decay at 2.1 σ significance level.

 $\Omega_b(6316)^-$ REFERENCES

AAIJ	20T PRL 124 082002	R. Aaij <i>et al.</i>	(LHCb Collab.)
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