

$\Omega_c(3065)^0$

$I(J^P) = ?(?^?)$ Status: ***

AAIJ 21AC rejects $J = 1/2$ hypothesis at 3.6σ .

$\Omega_c(3065)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
3065.54 ± 0.26 OUR AVERAGE				
3065.9 ± 0.4 ± 0.4 ^{+0.19} _{-0.22}	51	¹ AAIJ	21AC LHCB	pp at 7, 8, 13 TeV
3064.9 ± 0.6 ± 0.2	82	YELTON	18B BELLE	e^+e^- at $\Upsilon(4S)$
3065.6 ± 0.1 ± 0.3	1.74k	AAIJ	17AH LHCB	pp at 7, 8, 13 TeV

¹ Measured via $\Omega_b^- \rightarrow \Omega_c^{*0} \pi^- \rightarrow \Xi_c^+ K^- \pi^-$. The third uncertainty is due to the uncertainty in the Ξ_c^+ mass.

$\Omega_c(3065)^0$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
3.3 ± 0.6 OUR AVERAGE Error includes scale factor of 1.5.				
1.7 ± 1.0 ± 0.5	51	AAIJ	21AC LHCB	pp at 7, 8, 13 TeV
3.5 ± 0.4 ± 0.2	1.74k	AAIJ	17AH LHCB	pp at 7, 8, 13 TeV

$\Omega_c(3065)^0$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \Xi_c^+ K^-$	seen

$\Omega_c(3065)^0$ BRANCHING RATIOS

$\Gamma(\Xi_c^+ K^-)/\Gamma_{\text{total}}$	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_1/Γ
seen	51	¹ AAIJ	21AC LHCB	pp at 7, 8, 13 TeV	
seen	82	YELTON	18B BELLE	e^+e^- at $\Upsilon(4S)$	
seen	1.74k	² AAIJ	17AH LHCB	pp at 7, 8, 13 TeV	

¹ AAIJ 21AC report a significance of 11.9 σ .

² AAIJ 17AH report a significance of 23.9 σ .

$\Omega_c(3065)^0$ REFERENCES

AAIJ	21AC PR D104 L091102	R. Aaij <i>et al.</i>	(LHCb Collab.)
YELTON	18B PR D97 051102	J. Yelton <i>et al.</i>	(BELLE Collab.)
AAIJ	17AH PRL 118 182001	R. Aaij <i>et al.</i>	(LHCb Collab.)