

$\Omega_c(3000)^0$ $I(J^P) = ?(?^?)$ Status: *** $\Omega_c(3000)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
3000.41 ± 0.22 OUR AVERAGE				
$3000.7 \pm 1.0 \pm 0.2$	38	YELTON	18B BELL	e^+e^- at $\Upsilon(4S)$
$3000.4 \pm 0.2 \pm 0.1$	1.3k	AAIJ	17AH LHCB	pp at 7, 8, 13 TeV
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
$2999.2 \pm 0.9 \pm 0.9^{+0.19}_{-0.22}$	24	¹ AAIJ	21AC 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.

 $\Omega_c(3000)^0$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$4.5 \pm 0.6 \pm 0.3$	1.3k	AAIJ	17AH LHCB	pp at 7, 8, 13 TeV
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
$4.8 \pm 2.1 \pm 2.5$	24	AAIJ	21AC LHCB	pp at 7, 8, 13 TeV

 $\Omega_c(3000)^0$ DECAY MODES

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

 $\Omega_c(3000)^0$ BRANCHING RATIOS

$\Gamma(\Xi_c^+ K^-)/\Gamma_{\text{total}}$					Γ_1/Γ
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	
seen	24	¹ AAIJ	21AC LHCB	pp at 7, 8, 13 TeV	
seen	38	² YELTON	18B BELL	e^+e^- at $\Upsilon(4S)$	
seen	1.3k	³ AAIJ	17AH LHCB	pp at 7, 8, 13 TeV	

¹ AAIJ 21AC report a significance of 6.2σ .

² YELTON 18B report a significance of 3.9σ

³ AAIJ 17AH report a significance of 20.4σ .

 $\Omega_c(3000)^0$ 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.)