$\Omega_c(3000)^0$

$I(J^P) = ?(?^?)$ Status: ✱✱✱

$\Omega_c(3000)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
3000.41±0.22 OUR AVERAGE					
3000.7 ±1.0 ±0.2	38	YELTON	18B	BELL	e^+e^- at $\Upsilon(4S)$
3000.4 ±0.2 ±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 ±0.9 ±0.9$^{+0.19}_{-0.22}$	24	[1] AAIJ	21AC	LHCB	pp at 7, 8, 13 TeV

[1] Measured via $\Omega_b^- \to \Omega_c^{**0}\pi^- \to \Xi_c^+ K^- \pi^-$. 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±0.6±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±2.1±2.5	24	AAIJ	21AC LHCB	pp at 7, 8, 13 TeV

$\Omega_c(3000)^0$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Xi_c^+ K^-$	seen

$\Omega_c(3000)^0$ BRANCHING RATIOS

$\Gamma(\Xi_c^+ K^-)/\Gamma_{total}$ 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 6.2 σ.
[2] YELTON 18B report a significance of 3.9 σ
[3] AAIJ 17AH report a significance of 20.4 σ.

$\Omega_c(3000)^0$ REFERENCES

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