$\Omega_c(3050)^0$

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

AAIJ 21AC rejects $J = 1/2$ hypothesis at 2.2 σ.

$\Omega_c(3050)^0$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
3050.19±0.13 OUR AVERAGE					
3050.1 ±0.3 $\pm 0.2^{+0.19}_{-0.22}$	33	[1] AAIJ	21AC	LHCB	pp at 7, 8, 13 TeV
3050.2 ±0.4 ±0.2	28	YELTON	18B	BELL	e^+e^- at $\Upsilon(4S)$
3050.2 ±0.1 ±0.1	970	AAIJ	17AH	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.

$\Omega_c(3050)^0$ WIDTH

VALUE (MeV)	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<1.2	95	AAIJ	17AH	LHCB	pp at 7, 8, 13 TeV
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<1.6	95	AAIJ	21AC	LHCB	pp at 7, 8, 13 TeV

$\Omega_c(3050)^0$ DECAY MODES

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

$\Omega_c(3050)^0$ BRANCHING RATIOS

$\Gamma(\Xi_c^+ K^-)/\Gamma_{\text{total}}$ Γ_1/Γ

VALUE	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	33	[1] AAIJ	21AC	LHCB	pp at 7, 8, 13 TeV
seen	28	[2] YELTON	18B	BELL	e^+e^- at $\Upsilon(4S)$
seen	970	[3] AAIJ	17AH	LHCB	pp at 7, 8, 13 TeV

[1] AAIJ 21AC report a significance of 9.9 σ.
[2] YELTON 18B report a significance of 4.6 σ
[3] AAIJ 17AH report a significance of 20.4 σ.

$\Omega_c(3050)^0$ 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.)