

$\Omega_c(3050)^0$ $I(J^P) = ?(??)$ Status: ***AAIJ 21AC rejects $J = 1/2$ hypothesis at 2.2σ . $\Omega_c(3050)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
3050.19 ± 0.13 OUR AVERAGE				
3050.1 ± 0.3 ± 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 BELLE	e^+e^- at $\Upsilon(4S)$
3050.2 ± 0.1 ± 0.1	970	AAIJ	17AH LHCB	pp at 7, 8, 13 TeV
¹ Measured via $\Omega_b^- \rightarrow \Omega_c^{*0} \pi^- \rightarrow \Xi_c^+ K^- \pi^-$. The third uncertainty is due to the uncertainty in the Ξ_c^+ mass.				

 $\Omega_c(3050)^0$ 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)
$\Gamma_1 \quad \Xi_c^+ K^-$	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 BELLE	e^+e^- at $\Upsilon(4S)$	
seen	970	³ AAIJ	17AH LHCB	pp at 7, 8, 13 TeV	

¹ AAIJ 21AC report a significance of 9.9σ .² YELTON 18B report a significance of 4.6σ ³ AAIJ 17AH report a significance of 20.4σ . $\Omega_c(3050)^0$ 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.)