

$\Omega_c(3090)^0$ $I(J^P) = ?(??)$ Status: ***

NODE=B176

 $\Omega_c(3090)^0$ MASS

NODE=B176M

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
3090.15±0.26 OUR AVERAGE				
3090.16±0.11 ^{+0.06} _{-0.10} ±0.23	17k	¹ AAIJ	23AS LHCb	pp at 7, 8, 13 TeV
3091.0 ±1.1 ±1.0 ^{+0.19} _{-0.22}	41	² AAIJ	21AC LHCb	pp at 7, 8, 13 TeV
3089.3 ±1.2 ±0.2	87	YELTON	18B BELLE	e^+e^- at $\Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
3090.2 ±0.3 ±0.5	2.0k	³ AAIJ	17AH LHCb	pp at 7, 8, 13 TeV
¹ The third uncertainty is due to the uncertainty in the Ξ_c^+ mass, taken to be the PDG 22 fit result 2467.71 ± 0.23 MeV.				
² 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.				
³ See AAIJ 23AS.				

NODE=B176M

NODE=B176M;LINKAGE=D

NODE=B176M;LINKAGE=C

NODE=B176M;LINKAGE=E

 $\Omega_c(3090)^0$ WIDTH

NODE=B176W

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
8.48±0.44^{+0.61}_{-1.62}	17k	AAIJ	23AS LHCb	pp at 7, 8, 13 TeV
• • • We do not use the following data for averages, fits, limits, etc. • • •				
7.4 ±3.1 ±2.8	41	AAIJ	21AC LHCb	pp at 7, 8, 13 TeV
8.7 ±1.0 ±0.8	2.0k	¹ AAIJ	17AH LHCb	pp at 7, 8, 13 TeV
¹ See AAIJ 23AS.				

NODE=B176W

NODE=B176W;LINKAGE=B

 $\Omega_c(3090)^0$ DECAY MODES

NODE=B176215;NODE=B176

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

DESIG=1

 $\Omega_c(3090)^0$ BRANCHING RATIOS

NODE=B176225

$\Gamma(\Xi_c^+ K^-)/\Gamma_{\text{total}}$	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_1/Γ
seen	17k	AAIJ	23AS LHCb	pp at 7, 8, 13 TeV	
seen	41	¹ AAIJ	21AC LHCb	pp at 7, 8, 13 TeV	
seen	87	YELTON	18B BELLE	e^+e^- at $\Upsilon(4S)$	
• • • We do not use the following data for averages, fits, limits, etc. • • •					
seen	2.0k	^{2,3} AAIJ	17AH LHCb	pp at 7, 8, 13 TeV	
¹ AAIJ 21AC report a significance of 7.8 σ .					
² AAIJ 17AH report a significance of 21.1 σ .					
³ See AAIJ 23AS.					

NODE=B176R01
NODE=B176R01NODE=B176R01;LINKAGE=A
NODE=B176R01;LINKAGE=B
NODE=B176R01;LINKAGE=C $\Omega_c(3090)^0$ REFERENCES

NODE=B176

AAIJ	23AS PRL 131 131902	R. Aaij <i>et al.</i>	(LHCb Collab.)
PDG	22 PTEP 2022 083C01	R.L. Workman <i>et al.</i>	(PDG Collab.)
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.)

REFID=62449
REFID=61634
REFID=61439
REFID=58894
REFID=57925