$\Omega_c(3090)^0$

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

$\Omega_c(3090)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
3090.15±0.26 OUR AVERAGE					
$3090.16 \pm 0.11 \,^{+0.06}_{-0.10} \pm 0.23$	17k	[1] AAIJ	23AS	LHCB	pp at 7, 8, 13 TeV
$3091.0 \pm 1.1 \pm 1.0 \,^{+0.19}_{-0.22}$	41	[2] AAIJ	21AC	LHCB	pp at 7, 8, 13 TeV
$3089.3 \pm 1.2 \pm 0.2$	87	YELTON	18B	BELL	e^+e^- at $\Upsilon(4S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$3090.2 \pm 0.3 \pm 0.5$	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 $\Omega_b^- \to \Omega_c^{**0}\pi^- \to \Xi_c^+ K^-\pi^-$. The third uncertainty is due to the uncertainty in the Ξ_c^+ mass.
[3] See AAIJ 23AS.

$\Omega_c(3090)^0$ WIDTH

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

[1] See AAIJ 23AS.

$\Omega_c(3090)^0$ DECAY MODES

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

$\Omega_c(3090)^0$ BRANCHING RATIOS

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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
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	BELL	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.

$\Omega_c(3090)^0$ REFERENCES

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