$\Omega_c(3090)^0$

$I(J^P) = ?(?^?)$ Status: $\ast\ast\ast$

$\Omega_c(3090)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
3090.1±0.5 OUR AVERAGE					
$3091.0\pm1.1\pm1.0^{+0.19}_{-0.22}$	41	[1] AAIJ	21AC	LHCB	pp at 7, 8, 13 TeV
$3089.3\pm1.2\pm0.2$	87	YELTON	18B	BELL	e^+e^- at $\Upsilon(4S)$
$3090.2\pm0.3\pm0.5$	2.0k	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.

$\Omega_c(3090)^0$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
8.7±1.0±0.8	2.0k	AAIJ	17AH LHCB	pp at 7, 8, 13 TeV
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$7.4\pm3.1\pm2.8$	41	AAIJ	21AC LHCB	pp at 7, 8, 13 TeV

$\Omega_c(3090)^0$ 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	41	[1] AAIJ	21AC	LHCB	pp at 7, 8, 13 TeV
seen	87	YELTON	18B	BELL	e^+e^- at $\Upsilon(4S)$
seen	2.0k	[2] 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.

$\Omega_c(3090)^0$ 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.)