$\Xi_c'^0$

$I(J^P) = \frac{1}{2}(\frac{1}{2}^+)$ Status: ***

The $\Xi_c'^0$ and $\Xi_c'^+$ presumably complete the SU(3) sextet whose other members are the Σ_c^{++}, Σ_c^+, Σ_c^0, and Ω_c^0: see Fig. 5 in the "Quark Model" review. The quantum numbers given above come from this presumption but have not been measured.

$\Xi_c'^0$ MASS

The mass is obtained from the mass-difference measurement that follows.

VALUE (MeV)	*DOCUMENT ID*
2578.7±0.5 OUR FIT	

$\Xi_c'^0 - \Xi_c^0$ MASS DIFFERENCE

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
108.3±0.4 OUR FIT					
108.3±0.1±0.4	11.5k	YELTON	16	BELL	e^+e^-, Υ regions
• • • We do not use the following data for averages, fits, limits, etc. • • •					
107.0±1.4±2.5	28	JESSOP	99	CLE2	$e^+e^- \approx \Upsilon(4S)$

$\Xi_c'^0$ DECAY MODES

The $\Xi_c'^0 - \Xi_c^0$ mass difference is too small for any strong decay to occur.

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Xi_c^0\gamma$	seen

$\Xi_c'^0$ REFERENCES

YELTON	16	PR D94 052011	J. Yelton *et al.*	(BELLE Collab.)
JESSOP	99	PRL 82 492	C.P. Jessop *et al.*	(CLEO Collab.)