$\Xi_c'^+$

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

The $\Xi_c'^+$ and $\Xi_c'^0$ presumably complete the SU(3) sextet whose other members are the Σ_c^{++}, Σ_c^+, Σ_c^0, and Ω_c^0: see Fig. 2 in the note on Charmed Baryons just before the the Λ_c^+ Listings. The quantum numbers given above come from this presumption but have not been measured.

$\Xi_c'^+$ MASS

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

VALUE (MeV)	*DOCUMENT ID*
2574.1±3.3 OUR FIT	

$m_{\Xi_c'^+} - m_{\Xi_c^+}$

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
107.8±3.0 OUR FIT					
107.8±1.7±2.5	25	JESSOP	99	CLE2	$e^+e^- \approx \Upsilon(4S)$

$\Xi_c'^+$ DECAY MODES

The $m_{\Xi_c'^+} - m_{\Xi_c^+}$ mass difference is too small for any strong decay to occur.

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

$\Xi_c'^+$ REFERENCES

JESSOP 99 PRL 82 492 C.P. Jessop+ (CLEO Collab.)