$\Xi_c^{\prime+}$

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

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

$\Xi_c^{\prime+}$ MASS

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

VALUE (MeV)	DOCUMENT ID
2575.6±3.1 OUR FIT	

$\Xi_c^{\prime+} - \Xi_c^+$ MASS DIFFERENCE

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

$\Xi_c^{\prime+}$ DECAY MODES

The $\Xi_c^{\prime+}$–Ξ_c^+ mass difference is too small for any strong decay to occur.

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

$\Xi_c^{\prime+}$ REFERENCES

JESSOP   99   PRL 82 492   C.P. Jessop *et al.*   (CLEO Collab.)