



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

The  $\Xi_c^{'+}$  and  $\Xi_c^0$  presumably complete the SU(3) sextet whose other members are the  $\Sigma_c^{++}$ ,  $\Sigma_c^+$ ,  $\Sigma_c^0$ , and  $\Omega_c^0$ : see Fig. 3 in the Note on Charmed Baryons just before the  $\Lambda_c^+$  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
<b>2575.6 ± 3.1 OUR FIT</b>	

### $\Xi_c^{'+} - \Xi_c^+$ MASS DIFFERENCE

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

### $\Xi_c^{'+}$ DECAY MODES

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

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad \Xi_c^+ \gamma$	seen

### $\Xi_c^{'+}$ REFERENCES

JESSOP	99	PRL 82 492	C.P. Jessop <i>et al.</i>	(CLEO Collab.)
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