



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

The $\Xi_c^{'+}$ 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.5 in the "Quark Model" review. 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.

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>
2578.2±0.5 OUR FIT	Error includes scale factor of 1.1.

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

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
110.5±0.4 OUR FIT				
110.5±0.1±0.4	7k	YELTON	16	BELLE e^+e^- , Υ regions
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
107.8±1.7±2.5	25	JESSOP	99	CLE2 $e^+e^- \approx \Upsilon(4S)$

$\Xi_c^{'+} - \Xi_c^{\prime 0}$ MASS DIFFERENCE

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
-0.5±0.6 OUR FIT			
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
-0.8±0.1±0.5	YELTON	16	BELLE 7055 and 11,560 evts

$\Xi_c^{'+}$ DECAY MODES

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

Mode	Fraction (Γ_j/Γ)
$\Gamma_1 \quad \Xi_c^+ \gamma$	seen

$\Xi_c^{'+}$ REFERENCES

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