



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

The  $\Xi_c^{*0}$  and  $\Xi_c^{*+}$  presumably complete the SU(3) sextet whose other members are the  $\Sigma_c^{++}$ ,  $\Sigma_c^+$ ,  $\Sigma_c^0$ , and  $\Omega_c^0$ : 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.

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>
<b>2578.7±0.5 OUR FIT</b>	

### $\Xi_c^{*0} - \Xi_c^0$ MASS DIFFERENCE

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>108.3±0.4 OUR FIT</b>				
<b>108.3±0.1±0.4</b>	11.5k	YELTON	16	BELLE $e^+e^-$ , $\Upsilon$ 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 ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad \Xi_c^0 \gamma$	seen

### $\Xi_c^{*0}$ 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.)