

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

The $\Xi_c^{\prime 0}$ and $\Xi_c^{\prime +}$ 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. The quantum numbers given above come from this presumption but have not been measured.

Ξ'0 MASS

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

VALUE (MeV) DOCUMENT ID

2578.8±0.5 OUR FIT Error includes scale factor of 1.2.

$\equiv_c^{\prime 0} - \equiv_c^{0}$ MASS DIFFERENCE

VALUE (MeV)EVTSDOCUMENT IDTECNCOMMENT108.0 \pm 0.4 OUR FITError includes scale factor of 1.2.108.3 \pm 0.1 \pm 0.411.5kYELTON16BELL e^+e^- , Υ regions• • • We do not use the following data for averages, fits, limits, etc.• •107.0 \pm 1.4 \pm 2.528JESSOP99CLE2 $e^+e^-\approx \Upsilon(4S)$

$\equiv_{c}^{\prime 0}$ DECAY MODES

The $\Xi_c^{\prime0}$ - Ξ_c^0 mass difference is too small for any strong decay to occur.

	Mode	Fraction (Γ_i/Γ)
Γ ₁	$\equiv_c^0 \gamma$	seen

≡⁰ REFERENCES

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

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