

$\Xi_c(2790)$

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

A peak seen in the $\Xi_c' \pi$ mass spectrum. The simplest assignment, based on the mass, width, and decay mode, is that this belongs in the same SU(4) multiplet as the $\Lambda(1405)$ and the $\Lambda_c(2595)^+$, but the spin and parity have not been measured.

 $\Xi_c(2790)$ MASSES

The masses are obtained from the mass-difference measurements that follow.

 $\Xi_c(2790)^+$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>
2789.1 ± 3.2 OUR FIT	

 $\Xi_c(2790)^0$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>
2791.8 ± 3.3 OUR FIT	

 $\Xi_c(2790) - \Xi_c$ MASS DIFFERENCES **$m_{\Xi_c(2790)^+} - m_{\Xi_c^0}$**

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
318.2 ± 3.2 OUR FIT				
318.2 ± 1.3 ± 2.9	18	CSORNA	01	CLEO $e^+ e^- \approx \Upsilon(4S)$

 $m_{\Xi_c(2790)^0} - m_{\Xi_c^+}$

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
324.0 ± 3.3 OUR FIT				
324.0 ± 1.3 ± 3.0	14	CSORNA	01	CLEO $e^+ e^- \approx \Upsilon(4S)$

 $\Xi_c(2790)$ WIDTHS **$\Xi_c(2790)^+$ WIDTH**

<u>VALUE (MeV)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<15	90	CSORNA	01	CLEO $e^+ e^- \approx \Upsilon(4S)$

 $\Xi_c(2790)^0$ WIDTH

<u>VALUE (MeV)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<12	90	CSORNA	01	CLEO $e^+ e^- \approx \Upsilon(4S)$

 $\Xi_c(2790)$ DECAY MODES

Mode	Fraction (Γ_j/Γ)
$\Gamma_1 \quad \Xi_c' \pi$	seen

$\Xi_c(2790)$ REFERENCES

CSORNA

01

PRL 86 4243

S.E. Csorna *et al.*

(CLEO Collab.)
