

# $\Xi_c(2790)$

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

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>
<b>2789.1 ± 3.2 OUR FIT</b>	

### $\Xi_c(2790)^0$ MASS

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

## $\Xi_c(2790) - \Xi_c$ 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>
<b>318.2 ± 3.2 OUR FIT</b>				
<b>318.2 ± 1.3 ± 2.9</b>	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>
<b>324.0 ± 3.3 OUR FIT</b>				
<b>324.0 ± 1.3 ± 3.0</b>	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>
<b>&lt;15</b>	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>
<b>&lt;12</b>	90	CSORNA	01	CLEO $e^+ e^- \approx \Upsilon(4S)$

## $\Xi_c(2790)$ DECAY MODES

<u>Mode</u>	<u>Fraction (<math>\Gamma_i/\Gamma</math>)</u>
$\Gamma_1 \quad \Xi_c' \pi$	seen

## $\Xi_c(2790)$ REFERENCES

CSORNA

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PRL 86 4243

S.E. Csorna *et al.*

(CLEO Collab.)

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