

**$\Xi_c(2815)$** 

$$I(J^P) = \frac{1}{2}(\frac{3}{2}^-) \text{ Status: } ***$$

A narrow peak seen in the  $\Xi_c \pi \pi$  mass spectrum. The simplest assignment is that this belongs to the same SU(4) multiplet as the  $\Lambda(1520)$  and the  $\Lambda_c(2625)$ , but the spin and parity have not been measured.

 **$\Xi_c(2815)$  MASSES**

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

 **$\Xi_c(2815)^+$  MASS**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>
<b>2814.9 ± 1.8 OUR FIT</b>	

 **$\Xi_c(2815)^0$  MASS**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>
<b>2819.0 ± 2.5 OUR FIT</b>	

 **$\Xi_c(2815) - \Xi_c$  MASS DIFFERENCES** **$m_{\Xi_c(2815)^+} - m_{\Xi_c^+}$** 

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>348.6 ± 1.2 OUR FIT</b>				
<b>348.6 ± 0.6 ± 1.0</b>	20	ALEXANDER 99B	CLE2	$e^+ e^- \approx \Upsilon(4S)$

 **$m_{\Xi_c(2815)^0} - m_{\Xi_c^0}$** 

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>347.2 ± 2.1 OUR FIT</b>				
<b>347.2 ± 0.7 ± 2.0</b>	9	ALEXANDER 99B	CLE2	$e^+ e^- \approx \Upsilon(4S)$

 **$\Xi_c(2815)$  WIDTHS** **$\Xi_c(2815)^+$  WIDTH**

<u>VALUE (MeV)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;3.5</b>	90	ALEXANDER 99B	CLE2	$e^+ e^- \approx \Upsilon(4S)$

 **$\Xi_c(2815)^0$  WIDTH**

<u>VALUE (MeV)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;6.5</b>	90	ALEXANDER 99B	CLE2	$e^+ e^- \approx \Upsilon(4S)$

## $\Xi_c(2815)$ DECAY MODES

The  $\Xi_c \pi \pi$  modes are consistent with being entirely via  $\Xi_c(2645) \pi$ .

	Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$	$\Xi_c^+ \pi^+ \pi^-$	seen
$\Gamma_2$	$\Xi_c^0 \pi^+ \pi^-$	seen

## $\Xi_c(2815)$ REFERENCES

ALEXANDER 99B PRL 83 3390

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(CLEO Collab.)