$\Xi_c(2790)$

$I(J^P) = \frac{1}{2}(\frac{1}{2}^-)$ 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

VALUE (MeV)	DOCUMENT ID
2789.1±3.2 OUR FIT	

$\Xi_c(2790)^0$ MASS

VALUE (MeV)	DOCUMENT ID
2791.8±3.3 OUR FIT	

$\Xi_c(2790) - \Xi_c$ MASS DIFFERENCES

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

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

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

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
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

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

$\Xi_c(2790)^0$ WIDTH

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

$\Xi_c(2790)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Xi'_c\pi$	seen

$\Xi_c(2790)$ REFERENCES

CSORNA	01	PRL 86 4243	S.E. Csorna *et al.*	(CLEO Collab.)