$\Xi(2250)$

$I(J^P) = \frac{1}{2}(?^?)$ Status: **
J, P need confirmation.

OMITTED FROM SUMMARY TABLE

The evidence for this state is mixed. BARTSCH 69 sees a bump of not much statistical significance in $\Lambda\overline{K}\pi$, $\Sigma\overline{K}\pi$, and $\Xi\pi\pi$ mass spectra. GOLDWASSER 70 sees a narrower bump in $\Xi\pi\pi$ at a higher mass. Not seen by HASSALL 81 with 45 events/μb at 6.5 GeV/c. Seen by JENKINS 83. Perhaps seen by BIAGI 87.

$\Xi(2250)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
≈ 2250 OUR ESTIMATE						
2189± 7	66	BIAGI	87	SPEC	–	Ξ^- Be → ($\Xi^-\pi^+\pi^-$) X
2214± 5		JENKINS	83	MPS	–	$K^-p \rightarrow K^+$ MM
2295±15	18	GOLDWASSER	70	HBC	–	K^-p 5.5 GeV/c
2244±52	35	BARTSCH	69	HBC		K^-p 10 GeV/c

$\Xi(2250)$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
46±27	66	BIAGI	87	SPEC	–	Ξ^- Be → ($\Xi^-\pi^+\pi^-$) X
< 30		GOLDWASSER	70	HBC	–	K^-p 5.5 GeV/c
130±80		BARTSCH	69	HBC		

$\Xi(2250)$ DECAY MODES

	Mode
Γ_1	$\Xi\pi\pi$
Γ_2	$\Lambda\overline{K}\pi$
Γ_3	$\Sigma\overline{K}\pi$

$\Xi(2250)$ REFERENCES

BIAGI	87	ZPHY C34 15	+ (BRIS, CERN, GEVA, HEIDP, LAUS, LOQM, RAL)
JENKINS	83	PRL 51 951	+Albright, Diamond+ (FSU, BRAN, LBL, CINC, MASD)
HASSALL	81	NP B189 397	+Ansorge, Carter, Neale+ (CAVE, MSU)
GOLDWASSER	70	PR D1 1960	+Schultz (ILL)
BARTSCH	69	PL 28B 439	+ (AACH, BERL, CERN, LOIC, VIEN)