

# $\Xi(2250)$

$I(J^P) = \frac{1}{2}(??)$  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  $\Lambda\bar{K}\pi$ ,  $\Sigma\bar{K}\pi$ , 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/ $\mu\text{b}$  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
<b><math>\approx 2250</math> OUR ESTIMATE</b>					
$2189 \pm 7$	66	BIAGI	87	SPEC	- $\Xi^- \text{Be} \rightarrow (\Xi^- \pi^+ \pi^-)$ X
$2214 \pm 5$		JENKINS	83	MPS	- $K^- p \rightarrow K^+$ MM
$2295 \pm 15$	18	GOLDWASSER 70	HBC	-	$K^- p$ 5.5 GeV/c
$2244 \pm 52$	35	BARTSCH	69	HBC	$K^- p$ 10 GeV/c

### $\Xi(2250)$ WIDTH

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

### $\Xi(2250)$ DECAY MODES

Mode
$\Gamma_1$ $\Xi\pi\pi$
$\Gamma_2$ $\Lambda\bar{K}\pi$
$\Gamma_3$ $\Sigma\bar{K}\pi$

### $\Xi(2250)$ 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)