

# $\Xi(2250)$

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

### $\Xi(2250)$ WIDTH

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

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

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

### $\Xi(2250)$ REFERENCES

BIAGI 87	ZPHY C34 15	S.F. Biagi <i>et al.</i>	(BRIS, CERN, GEVA+)
JENKINS 83	PRL 51 951	C.M. Jenkins <i>et al.</i>	(FSU, BRAN, LBL+)
HASSALL 81	NP B189 397	J.K. Hassall <i>et al.</i>	(CAVE, MSU)
GOLDWASSER 70	PR D1 1960	E.L. Goldwasser, P.F. Schultz	(ILL)
BARTSCH 69	PL 28B 439	J. Bartsch <i>et al.</i>	(AACH, BERL, CERN+)