NODE=B021

$\Xi(1620)$

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

OMITTED FROM SUMMARY TABLE

What little evidence there is consists of weak signals in the $\Xi\pi$ channel. A number of other experiments (e.g., BORENSTEIN 72 and HASSALL 81) have looked for but not seen any effect.

NODE=B021

$\Xi(1620)$ MASS

NODE=B021205

NODE=B021M
→ NOT CHECKED ←

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
≈ 1620 OUR ESTIMATE					
1624± 3	31	BRIEFEL	77	HBC	$K^- p$ 2.87 GeV/c
1633±12	34	DEBELLEFON	75B	HBC	$K^- p \to \Xi^- \overline{K}\pi$
1606± 6	29	ROSS	72	HBC	$K^- p$ 3.1–3.7 GeV/c

$\Xi(1620)$ WIDTH

NODE=B021210

NODE=B021W

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
22.5	31	[1] BRIEFEL	77	HBC	$K^- p$ 2.87 GeV/c
40 ±15	34	DEBELLEFON	75B	HBC	$K^- p \to \Xi^- \overline{K}\pi$
21 ± 7	29	ROSS	72	HBC	$K^- p \to \Xi^- \pi^+ K^{*0}(892)$

$\Xi(1620)$ DECAY MODES

NODE=B021215;NODE=B021

	Mode
Γ_1	$\Xi\pi$

DESIG=1

$\Xi(1620)$ FOOTNOTES

NODE=B021

[1] The fit is insensitive to values between 15 and 30 MeV.

NODE=B021;LINKAGE=A

$\Xi(1620)$ REFERENCES

NODE=B021

HASSALL	81	NP B189 397	J.K. Hassall *et al.*	(CAVE, MSU)	REFID=32505
BRIEFEL	77	PR D16 2706	E. Briefel *et al.*	(BRAN, UMD, SYRA+)	REFID=32345
Also		Duke Conf. 317 Hyperon Resonances, 1970	E. Briefel *et al.*	(BRAN, UMD, SYRA+)	REFID=32497
Also		PR D12 1859	E. Briefel *et al.*	(BRAN, UMD, SYRA+)	REFID=32464
DEBELLEFON	75B	NC 28A 289	A. de Bellefon *et al.*	(CDEF, SACL)	REFID=32003
BORENSTEIN	72	PR D5 1559	S.R. Borenstein *et al.*	(BNL, MICH) I	REFID=20215
ROSS	72	PL 38B 177	R.T. Ross *et al.*	(OXF) I	REFID=32494

OTHER RELATED PAPERS

HUNGERBU...	74	PR D10 2051	V. Hungerbuhler *et al.*	(YALE, FNAL, BNL+)	REFID=32061
SCHMIDT	73	Purdue Conf. 363	P.E. Schmidt	(BRAN)	REFID=32502
KALBFLEISCH	70	Duke Conf. 331 Hyperon Resonances 1970	G.R. Kalbfleisch	(BNL) I	REFID=32500
APSELL	69	PRL 23 884	S.P. Apsell *et al.*	(BRAN, UMD, SYRA+)	REFID=32498
BARTSCH	69	PL 28B 439	J. Bartsch *et al.*	(AACH, BERL, CERN+)	REFID=32499