$\Xi(1620)$

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

$\Xi(1620)$ MASS

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	$K^- p \rightarrow \Xi^- \overline{K}\pi$
1606± 6	29	ROSS	72	HBC	$K^- p$ 3.1–3.7 GeV/c

$\Xi(1620)$ WIDTH

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	$K^- p \rightarrow \Xi^- \overline{K}\pi$
21 ± 7	29	ROSS	72	HBC	$K^- p \rightarrow \Xi^- \pi^+ K^{*0}(892)$

$\Xi(1620)$ DECAY MODES

	Mode
Γ_1	$\Xi\pi$

$\Xi(1620)$ FOOTNOTES

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

$\Xi(1620)$ REFERENCES

HASSALL	81	NP B189 397	+Ansorge, Carter, Neale+	(CAVE, MSU)
BRIEFEL	77	PR D16 2706	+Gourevitch, Chang+	(BRAN, UMD, SYRA, TUFTS)
Also	70	Duke Conf. 317	Briefel+	(BRAN, UMD, SYRA, TUFTS)
Also	75	PR D12 1859	Briefel, Gourevitch+	(BRAN, UMD, SYRA, TUFTS)
DEBELLEFON	75B	NC 28A 289	De Bellefon, Berthon, Billoir+	(CDEF, SACL)
BORENSTEIN	72	PR D5 1559	+Danburg, Kalbfleisch+	(BNL, MICH) I
ROSS	72	PL 38B 177	+Buran, Lloyd, Mulvey, Radojicic	(OXF) I

OTHER RELATED PAPERS

HUNGERBU...	74	PR D10 2051	Hungerbuhler, Majka+	(YALE, FNAL, BNL, PITT)
SCHMIDT	73	Purdue Conf. 363		(BRAN)
KALBFLEISCH	70	Duke Conf. 331		(BNL) I
APSELL	69	PRL 23 884	+	(BRAN, UMD, SYRA, TUFTS)
BARTSCH	69	PL 28B 439	+	(AACH, BERL, CERN, LOIC, VIEN)