$K_2(2250)$

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

OMITTED FROM SUMMARY TABLE

This entry contains various peaks in strange meson systems reported in the 2150–2260 MeV region, as well as enhancements seen in the antihyperon-nucleon system, either in the mass spectra or in the $J^P = 2^-$ wave.

$K_2(2250)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
2247±17 OUR AVERAGE						
2200±40		[1] ARMSTRONG	83C	OMEG	−	18 $K^- p \rightarrow \Lambda\overline{p}X$
2235±50		[1] BAUBILLIER	81	HBC	−	8 $K^- p \rightarrow \Lambda\overline{p}X$
2260±20		[1] CLELAND	81	SPEC	±	50 $K^+ p \rightarrow \Lambda\overline{p}X$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
2147± 4	37	CHLIAPNIK...	79	HBC	+	32 $K^+ p \rightarrow \overline{\Lambda}pX$
2240±20	20	LISSAUER	70	HBC		9 $K^+ p$

[1] $J^P = 2^-$ from moments analysis.

$K_2(2250)$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
180±30 OUR AVERAGE	Error includes scale factor of 1.4.					
150±30		[2] ARMSTRONG	83C	OMEG	−	18 $K^- p \rightarrow \Lambda\overline{p}X$
210±30		[2] CLELAND	81	SPEC	±	50 $K^+ p \rightarrow \Lambda\overline{p}X$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
∼ 200		[2] BAUBILLIER	81	HBC	−	8 $K^- p \rightarrow \Lambda\overline{p}X$
∼ 40	37	CHLIAPNIK...	79	HBC	+	32 $K^+ p \rightarrow \overline{\Lambda}pX$
80±20	20	LISSAUER	70	HBC		9 $K^+ p$

[2] $J^P = 2^-$ from moments analysis.

$K_2(2250)$ DECAY MODES

	Mode
Γ_1	$K\pi\pi$
Γ_2	$p\overline{\Lambda}$

$K_2(2250)$ REFERENCES

ARMSTRONG	83C	NP B227 365	+	(BARI, BIRM, CERN, MILA, CURIN+)
BAUBILLIER	81	NP B183 1	+	(BIRM, CERN, GLAS, MSU, CURIN) JP
CLELAND	81	NP B184 1	+Nef, Martin+	(PITT, GEVA, LAUS, DURH) JP
CHLIAPNIK...	79	NP B158 253	Chliapnikov, Gerdyukov+	(CERN, BELG, MONS)
LISSAUER	70	NP B18 491	+Alexander, Firestone, Goldhaber	(LBL)

OTHER RELATED PAPERS

ALEXANDER	68B	PRL 20 755	+Firestone, Goldhaber, Shen	(LRL)