$K^*(1410)$

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

$K^*(1410)$ MASS

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1414±15 OUR AVERAGE Error includes scale factor of 1.3.					
1380±21±19	ASTON	88	LASS	0	11 $K^- p \to K^- \pi^+ n$
1420± 7±10	ASTON	87	LASS	0	11 $K^- p \to \overline{K}^0 \pi^+ \pi^- n$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1367±54	BIRD	89	LASS	–	11 $K^- p \to \overline{K}^0 \pi^- p$
1474±25	BAUBILLIER	82B	HBC	0	8.25 $K^- p \to \overline{K}^0 2\pi n$
1500±30	ETKIN	80	MPS	0	6 $K^- p \to \overline{K}^0 \pi^+ \pi^- n$

$K^*(1410)$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
232± 21 OUR AVERAGE Error includes scale factor of 1.1.					
176± 52±22	ASTON	88	LASS	0	11 $K^- p \to K^- \pi^+ n$
240± 18±12	ASTON	87	LASS	0	11 $K^- p \to \overline{K}^0 \pi^+ \pi^- n$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
114±101	BIRD	89	LASS	–	11 $K^- p \to \overline{K}^0 \pi^- p$
275± 65	BAUBILLIER	82B	HBC	0	8.25 $K^- p \to \overline{K}^0 2\pi n$
500±100	ETKIN	80	MPS	0	6 $K^- p \to \overline{K}^0 \pi^+ \pi^- n$

$K^*(1410)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)	Confidence level
Γ_1	$K^*(892)\pi$	> 40 %	95%
Γ_2	$K\pi$	(6.6±1.3) %	
Γ_3	$K\rho$	< 7 %	95%
Γ_4	γK^0	seen	

$K^*(1410)$ PARTIAL WIDTHS

$\Gamma(\gamma K^0)$ — Γ_4

VALUE (keV)	CL%	DOCUMENT ID	TECN	COMMENT
<52.9	90	ALAVI-HARATI02B	KTEV	$K + A \to K^* + A$

$K^*(1410)$ BRANCHING RATIOS

$\Gamma(K\rho)/\Gamma(K^*(892)\pi)$ — Γ_3/Γ_1

VALUE	CL%	DOCUMENT ID		TECN	CHG	COMMENT
<0.17	95	ASTON	84	LASS	0	11 $K^- p \to \overline{K}^0 2\pi n$

$\Gamma(K\pi)/\Gamma(K^*(892)\pi)$ — Γ_2/Γ_1

VALUE	CL%	DOCUMENT ID		TECN	CHG	COMMENT
<0.16	95	ASTON	84	LASS	0	11 $K^- p \to \overline{K}^0 2\pi n$

$\Gamma(K\pi)/\Gamma_{total}$ — Γ_2/Γ

VALUE	DOCUMENT ID		TECN	CHG	COMMENT
0.066±0.010±0.008	ASTON	88	LASS	0	11 $K^- p \to K^- \pi^+ n$

$K^*(1410)$ REFERENCES

ALAVI-HARATI	02B	PRL 89 072001	A. Alavi-Harati et al.	(FNAL KTeV Collab.)
BIRD	89	SLAC-332	P.F. Bird	(SLAC)
ASTON	88	NP B296 493	D. Aston et al.	(SLAC, NAGO, CINC, INUS)
ASTON	87	NP B292 693	D. Aston et al.	(SLAC, NAGO, CINC, INUS)
ASTON	84	PL 149B 258	D. Aston et al.	(SLAC, CARL, OTTA) JP
BAUBILLIER	82B	NP B202 21	M. Baubillier et al.	(BIRM, CERN, GLAS+)
ETKIN	80	PR D22 42	A. Etkin et al.	(BNL, CUNY) JP

OTHER RELATED PAPERS

LI	05E	MPL A20 2497	D.-M. Li et al.