$K^*(1410)$

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

$K^*(1410)$ 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-HARATI	02B	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 $K^- p \rightarrow \overline{K}^0 2\pi n$

$\Gamma(K\pi)/\Gamma_{\text{total}}$ Γ_2/Γ

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

$K^*(1410)$ 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