

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 $K^- p \rightarrow K^- \pi^+ n$
1420± 7±10	ASTON	87 LASS	0	11 $K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
1367±54	BIRD	89 LASS	–	11 $K^- p \rightarrow \bar{K}^0 \pi^- p$
1474±25	BAUBILLIER	82B HBC	0	8.25 $K^- p \rightarrow \bar{K}^0 2\pi n$
1500±30	ETKIN	80 MPS	0	6 $K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$

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 $K^- p \rightarrow K^- \pi^+ n$
240± 18±12	ASTON	87 LASS	0	11 $K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
114±101	BIRD	89 LASS	–	11 $K^- p \rightarrow \bar{K}^0 \pi^- p$
275± 65	BAUBILLIER	82B HBC	0	8.25 $K^- p \rightarrow \bar{K}^0 2\pi n$
500±100	ETKIN	80 MPS	0	6 $K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$

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
<52.9	90	ALAVI-HARATI02B KTEV
		COMMENT $K + A \rightarrow K^* + A$

K*(1410) BRANCHING RATIOS

$\Gamma(K\rho)/\Gamma(K^*(892)\pi)$		Γ_3/Γ_1
VALUE	CL%	DOCUMENT ID
<0.17	95	ASTON
		TECN 84 LASS 0
		COMMENT 11 $K^- p \rightarrow \bar{K}^0 2\pi n$

$\Gamma(K\pi)/\Gamma(K^*(892)\pi)$						Γ_2/Γ_1
<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>	
<0.16	95	ASTON	84	LASS	0	11 $K^- p \rightarrow \bar{K}^0 2\pi n$

$\Gamma(K\pi)/\Gamma_{\text{total}}$						Γ_2/Γ
<u>VALUE</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>	
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 <i>et al.</i>	(FNAL KTeV Collab.)
BIRD 89	SLAC-332	P.F. Bird	(SLAC)
ASTON 88	NP B296 493	D. Aston <i>et al.</i>	(SLAC, NAGO, CINC, INUS)
ASTON 87	NP B292 693	D. Aston <i>et al.</i>	(SLAC, NAGO, CINC, INUS)
ASTON 84	PL 149B 258	D. Aston <i>et al.</i>	(SLAC, CARL, OTTA) JP
BAUBILLIER 82B	NP B202 21	M. Baubillier <i>et al.</i>	(BIRM, CERN, GLAS+)
ETKIN 80	PR D22 42	A. Etkin <i>et al.</i>	(BNL, CUNY) JP