

# K\*(1410)

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

## K\*(1410) MASS

VALUE (MeV)	DOCUMENT ID	TECN	CHG	COMMENT
<b>1414 ± 15 OUR AVERAGE</b> 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
<b>232 ± 21 OUR AVERAGE</b> 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 ( $\Gamma_i/\Gamma$ )	Confidence level
$\Gamma_1$ $K^*(892)\pi$	> 40 %	95%
$\Gamma_2$ $K\pi$	( 6.6 ± 1.3 ) %	
$\Gamma_3$ $K\rho$	< 7 %	95%
$\Gamma_4$ $\gamma K^0$	seen	

## K\*(1410) PARTIAL WIDTHS

$\Gamma(\gamma K^0)$	CL%	DOCUMENT ID	TECN	COMMENT	$\Gamma_4$
<52.9	90	ALAVI-HARATI02B	KTEV	$K + A \rightarrow K^* + A$	

## K\*(1410) BRANCHING RATIOS

$\Gamma(K\rho)/\Gamma(K^*(892)\pi)$	CL%	DOCUMENT ID	TECN	CHG	COMMENT	$\Gamma_3/\Gamma_1$
<0.17	95	ASTON	84	LASS	0 11 $K^- p \rightarrow \bar{K}^0 2\pi n$	

$\Gamma(K\pi)/\Gamma(K^*(892)\pi)$						$\Gamma_2/\Gamma_1$
VALUE	CL%	DOCUMENT ID	TECN	CHG	COMMENT	
<0.16	95	ASTON	84	LASS	0	11 $K^- p \rightarrow \bar{K}^0 2\pi n$

$\Gamma(K\pi)/\Gamma_{\text{total}}$						$\Gamma_2/\Gamma$
VALUE		DOCUMENT ID	TECN	CHG	COMMENT	
<b>0.066±0.010±0.008</b>		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

### OTHER RELATED PAPERS

LI	05E	MPL A20 2497	D.-M. Li <i>et al.</i>
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