

$K^*(1410)$ $I(J^P) = \frac{1}{2}(1^-)$ **$K^*(1410)$ MASS**

VALUE (MeV)	DOCUMENT ID	TECN	CHG	COMMENT
1414 ± 15 OUR AVERAGE	Error includes scale factor of 1.3.			
$1380 \pm 21 \pm 19$	ASTON	88	LASS	$0 \quad 11 \ K^- p \rightarrow K^- \pi^+ n$
$1420 \pm 7 \pm 10$	ASTON	87	LASS	$0 \quad 11 \ K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1276^{+72}_{-77}	1,2 BOITO	09	RVUE	$\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
1367 ± 54	BIRD	89	LASS	$- \quad 11 \ K^- p \rightarrow \bar{K}^0 \pi^- p$
1474 ± 25	BAUBILLIER	82B	HBC	$0 \quad 8.25 \ K^- p \rightarrow \bar{K}^0 2\pi n$
1500 ± 30	ETKIN	80	MPS	$0 \quad 6 \ K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$

¹ From the pole position of the $K\pi$ vector form factor in the complex s -plane and using EPIFANOV 07 data.

² Systematic uncertainties not estimated.

 $K^*(1410)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	CHG	COMMENT
232 ± 21 OUR AVERAGE	Error includes scale factor of 1.1.			
$176 \pm 52 \pm 22$	ASTON	88	LASS	$0 \quad 11 \ K^- p \rightarrow K^- \pi^+ n$
$240 \pm 18 \pm 12$	ASTON	87	LASS	$0 \quad 11 \ K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
198^{+61}_{-87}	3,4 BOITO	09	RVUE	$\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
114 ± 101	BIRD	89	LASS	$- \quad 11 \ K^- p \rightarrow \bar{K}^0 \pi^- p$
275 ± 65	BAUBILLIER	82B	HBC	$0 \quad 8.25 \ K^- p \rightarrow \bar{K}^0 2\pi n$
500 ± 100	ETKIN	80	MPS	$0 \quad 6 \ K^- p \rightarrow \bar{K}^0 \pi^+ \pi^- n$

³ From the pole position of the $K\pi$ vector form factor in the complex s -plane and using EPIFANOV 07 data.

⁴ Systematic uncertainties not estimated.

 $K^*(1410)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)	Confidence level
$\Gamma_1 \ K^*(892)\pi$	$> 40 \ %$	95%
$\Gamma_2 \ K\pi$	$(6.6 \pm 1.3) \ %$	
$\Gamma_3 \ K\rho$	$< 7 \ %$	95%
$\Gamma_4 \ \gamma K^0$	seen	

$K^*(1410)$ PARTIAL WIDTHS

$\Gamma(\gamma K^0)$

VALUE (keV)	CL%	DOCUMENT ID	TECN	COMMENT	Γ_4
<52.9	90	ALAVI-HARATI02B	KTEV	$K + A \rightarrow K^* + A$	

$K^*(1410)$ BRANCHING RATIOS

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

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

$\Gamma(K\pi)/\Gamma(K^*(892)\pi)$

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

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

VALUE	DOCUMENT ID	TECN	CHG	COMMENT	Γ_2/Γ
0.066±0.010±0.008	ASTON	88	LASS	0	$11 K^- p \rightarrow K^- \pi^+ n$

$K^*(1410)$ REFERENCES

BOITO	09	EPJ C59 821	D.R. Boito, R. Escribano, M. Jamin
EPIFANOV	07	PL B654 65	D. Epifanov <i>et al.</i> (BELLE Collab.)
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+) JP
ETKIN	80	PR D22 42	A. Etkin <i>et al.</i> (BNL, CUNY) JP
