NODE=M094

$K^*(1410)$

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

$K^*(1410)$ MASS

NODE=M094M

NODE=M094M

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. • • •					
1276^{+72}_{-77}	[1,2] BOITO	09	RVUE		$\tau^- \to K^0_S \pi^- \nu_\tau$
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 $K^- p \to \overline{K}^0 \pi^+ \pi^- n$

[1] From the pole position of the $K\pi$ vector form factor in the complex s-plane and using EPIFANOV 07 data. NODE=M094M;LINKAGE=BI

[2] Systematic uncertainties not estimated. NODE=M094M;LINKAGE=NS

$K^*(1410)$ WIDTH

NODE=M094W

NODE=M094W

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. • • •					
198^{+61}_{-87}	[3,4] BOITO	09	RVUE		$\tau^- \to K^0_S \pi^- \nu_\tau$
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 $K^- p \to \overline{K}^0 \pi^+ \pi^- n$

[3] From the pole position of the $K\pi$ vector form factor in the complex s-plane and using EPIFANOV 07 data. NODE=M094W;LINKAGE=BI

[4] Systematic uncertainties not estimated. NODE=M094W;LINKAGE=NS

$K^*(1410)$ DECAY MODES

NODE=M094215;NODE=M094

	Mode	Fraction (Γ_i/Γ)	Confidence level	
Γ_1	$K^*(892)\pi$	> 40 %	95%	DESIG=2;OUR EST;→ UNCHECKED ←
Γ_2	$K\pi$	(6.6±1.3) %		DESIG=1
Γ_3	$K\rho$	< 7 %	95%	DESIG=3;OUR EST;→ UNCHECKED ←
Γ_4	γK^0	seen		DESIG=4;OUR EST;→ UNCHECKED ←

$K^*(1410)$ PARTIAL WIDTHS

NODE=M094217

$\Gamma(\gamma K^0)$ — Γ_4

NODE=M094W1

NODE=M094W1

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

$K^*(1410)$ BRANCHING RATIOS

NODE=M094220

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

NODE=M094R1

NODE=M094R1

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

NODE=M094R2

NODE=M094R2

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

NODE=M094R3

NODE=M094R3

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

NODE=M094

BOITO	09	EPJ C59 821	D.R. Boito, R. Escribano, M. Jamin		REFID=52728
EPIFANOV	07	PL B654 65	D. Epifanov *et al.*	(BELLE Collab.)	REFID=51929
ALAVI-HARATI	02B	PRL 89 072001	A. Alavi-Harati *et al.*	(FNAL KTeV Collab.)	REFID=48822
BIRD	89	SLAC-332	P.F. Bird	(SLAC)	REFID=41002
ASTON	88	NP B296 493	D. Aston *et al.*	(SLAC, NAGO, CINC, INUS)	REFID=40262
ASTON	87	NP B292 693	D. Aston *et al.*	(SLAC, NAGO, CINC, INUS)	REFID=40234
ASTON	84	PL 149B 258	D. Aston *et al.*	(SLAC, CARL, OTTA) JP	REFID=22689
BAUBILLIER	82B	NP B202 21	M. Baubillier *et al.*	(BIRM, CERN, GLAS+)	REFID=22551
ETKIN	80	PR D22 42	A. Etkin *et al.*	(BNL, CUNY) JP	REFID=22545