

$K^*(1410)$

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

### $K^*(1410)$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
<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

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
<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%

### $K^*(1410)$ BRANCHING RATIOS

$\Gamma(K\rho)/\Gamma(K^*(892)\pi)$						$\Gamma_3/\Gamma_1$
<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>	
<0.17	95	ASTON	84 LASS	0	11 $K^- p \rightarrow \bar{K}^0 2\pi n$	
$\Gamma(K\pi)/\Gamma(K^*(892)\pi)$						$\Gamma_2/\Gamma_1$
<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 $K^- p \rightarrow \bar{K}^0 2\pi n$	
$\Gamma(K\pi)/\Gamma_{\text{total}}$						$\Gamma_2/\Gamma$
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>		
<b>0.066±0.010±0.008</b>	ASTON	88 LASS	0	11 $K^- p \rightarrow K^- \pi^+ n$		

### **$K^*(1410)$ REFERENCES**

BIRD	89	SLAC-332		(SLAC)
ASTON	88	NP B296 493	+Awaji, Bienz, Bird+	(SLAC, NAGO, CINC, INUS)
ASTON	87	NP B292 693	+Awaji, D'Amore+	(SLAC, NAGO, CINC, INUS)
ASTON	84	PL 149B 258	+Carnegie, Dunwoodie+	(SLAC, CARL, OTTA) JP
BAUBILLIER	82B	NP B202 21	+	(BIRM, CERN, GLAS, MSU, CURIN)
ETKIN	80	PR D22 42	+Foley, Lindenbaum, Kramer+	(BNL, CUNY) JP

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