

# K\*(892)

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

## K\*(892) MASS

### CHARGED ONLY, HADROPRODUCED

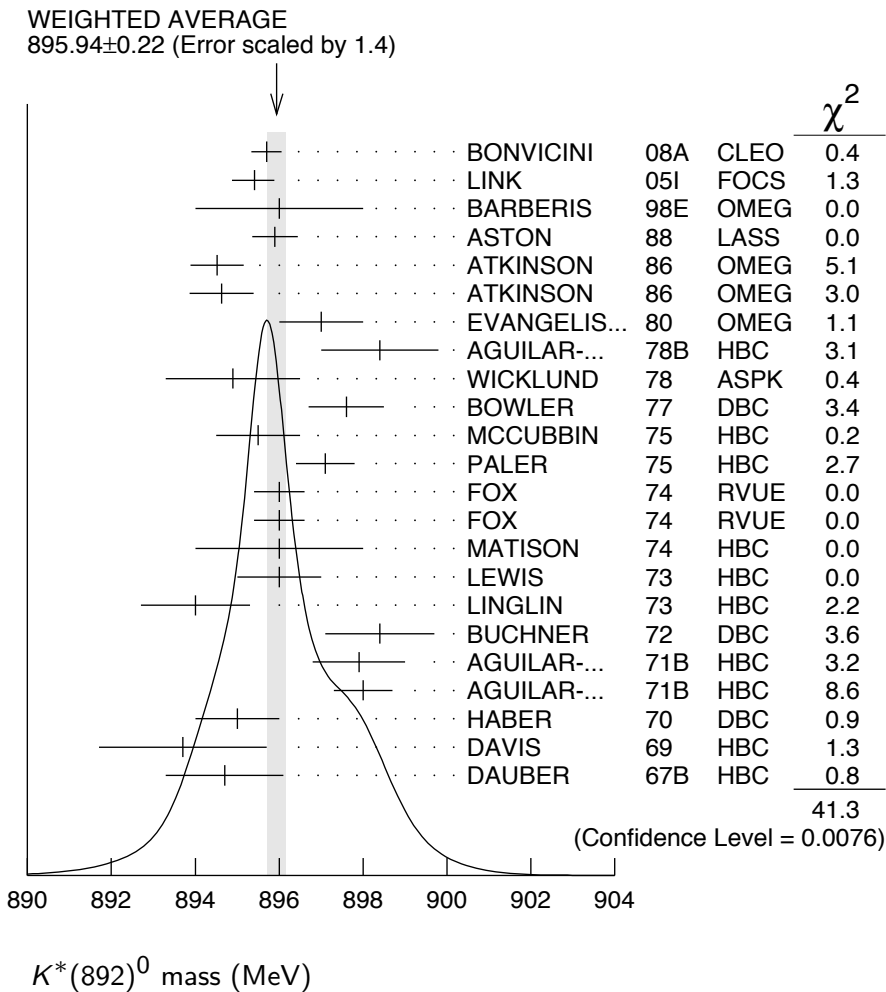
VALUE (MeV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>891.66 ± 0.26 OUR AVERAGE</b>					
892.6 ± 0.5	5840	BAUBILLIER 84B	HBC	-	8.25 $K^- p \rightarrow \bar{K}^0 \pi^- p$
888 ± 3		NAPIER 84	SPEC	+	200 $\pi^- p \rightarrow 2K_S^0 X$
891 ± 1		NAPIER 84	SPEC	-	200 $\pi^- p \rightarrow 2K_S^0 X$
891.7 ± 2.1	3700	BARTH 83	HBC	+	70 $K^+ p \rightarrow K^0 \pi^+ X$
891 ± 1	4100	TOAFF 81	HBC	-	6.5 $K^- p \rightarrow \bar{K}^0 \pi^- p$
892.8 ± 1.6		AJINENKO 80	HBC	+	32 $K^+ p \rightarrow K^0 \pi^+ X$
890.7 ± 0.9	1800	AGUILAR-... 78B	HBC	±	0.76 $\bar{p} p \rightarrow K^\mp K_S^0 \pi^\pm$
886.6 ± 2.4	1225	BALAND 78	HBC	±	12 $\bar{p} p \rightarrow (K\pi)^\pm X$
891.7 ± 0.6	6706	COOPER 78	HBC	±	0.76 $\bar{p} p \rightarrow (K\pi)^\pm X$
891.9 ± 0.7	9000	<sup>1</sup> PALER 75	HBC	-	14.3 $K^- p \rightarrow (K\pi)^-$ X
892.2 ± 1.5	4404	AGUILAR-... 71B	HBC	-	3.9,4.6 $K^- p \rightarrow$ $(K\pi)^- p$
891 ± 2	1000	CRENNELL 69D	DBC	-	3.9 $K^- N \rightarrow K^0 \pi^- X$
890 ± 3.0	720	BARLOW 67	HBC	±	1.2 $\bar{p} p \rightarrow (K^0 \pi)^\pm K^\mp$
889 ± 3.0	600	BARLOW 67	HBC	±	1.2 $\bar{p} p \rightarrow (K^0 \pi)^\pm K\pi$
891 ± 2.3	620	<sup>2</sup> DEBAERE 67B	HBC	+	3.5 $K^+ p \rightarrow K^0 \pi^+ p$
891.0 ± 1.2	1700	<sup>3</sup> WOJCICKI 64	HBC	-	1.7 $K^- p \rightarrow \bar{K}^0 \pi^- p$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
893.5 ± 1.1	27k	<sup>4</sup> ABELE 99D	CBAR	±	0.0 $\bar{p} p \rightarrow K^+ K^- \pi^0$
890.4 ± 0.2 ± 0.5	80 ± 0.8k	<sup>5</sup> BIRD 89	LASS	-	11 $K^- p \rightarrow \bar{K}^0 \pi^- p$
890.0 ± 2.3	800	<sup>2,3</sup> CLELAND 82	SPEC	+	30 $K^+ p \rightarrow K_S^0 \pi^+ p$
896.0 ± 1.1	3200	<sup>2,3</sup> CLELAND 82	SPEC	+	50 $K^+ p \rightarrow K_S^0 \pi^+ p$
893 ± 1	3600	<sup>2,3</sup> CLELAND 82	SPEC	-	50 $K^+ p \rightarrow K_S^0 \pi^- p$
896.0 ± 1.9	380	DELFOSE 81	SPEC	+	50 $K^\pm p \rightarrow K^\pm \pi^0 p$
886.0 ± 2.3	187	DELFOSE 81	SPEC	-	50 $K^\pm p \rightarrow K^\pm \pi^0 p$
894.2 ± 2.0	765	<sup>2</sup> CLARK 73	HBC	-	3.13 $K^- p \rightarrow \bar{K}^0 \pi^- p$
894.3 ± 1.5	1150	<sup>2,3</sup> CLARK 73	HBC	-	3.3 $K^- p \rightarrow \bar{K}^0 \pi^- p$
892.0 ± 2.6	341	<sup>2</sup> SCHWEING...68	HBC	-	5.5 $K^- p \rightarrow \bar{K}^0 \pi^- p$

### CHARGED ONLY, PRODUCED IN $\tau$ LEPTON DECAYS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>895.47 ± 0.20 ± 0.74</b>	53k	<sup>6</sup> EPIFANOV 07	BELL	$\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
892.0 ± 0.5		<sup>7</sup> BOITO 10	RVUE	$\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
892.0 ± 0.9		<sup>8,9</sup> BOITO 09	RVUE	$\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
895.3 ± 0.2		<sup>8,10</sup> JAMIN 08	RVUE	$\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
896.4 ± 0.9	11970	<sup>11</sup> BONVICINI 02	CLEO	$\tau^- \rightarrow K^- \pi^0 \nu_\tau$
895 ± 2		<sup>12</sup> BARATE 99R	ALEP	$\tau^- \rightarrow K^- \pi^0 \nu_\tau$

### NEUTRAL ONLY

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>895.94 ± 0.22 OUR AVERAGE</b>		Error includes scale factor of 1.4. See the ideogram below.		
895.7 ± 0.2 ± 0.3	141k	<sup>13</sup> BONVICINI	08A CLEO	$D^+ \rightarrow K^- \pi^+ \pi^+$
895.41 ± 0.32 <sup>+0.35</sup> <sub>-0.43</sub>	18k	<sup>14</sup> LINK	05I FOCS	$D^+ \rightarrow K^- \pi^+ \mu^+ \nu_\mu$
896 ± 2		BARBERIS	98E OMEG	450 $pp \rightarrow p_f p_s K^* \bar{K}^*$
895.9 ± 0.5 ± 0.2		ASTON	88 LASS	11 $K^- p \rightarrow K^- \pi^+ n$
894.52 ± 0.63	25k	<sup>1</sup> ATKINSON	86 OMEG	20-70 $\gamma p$
894.63 ± 0.76	20k	<sup>1</sup> ATKINSON	86 OMEG	20-70 $\gamma p$
897 ± 1	28k	EVANGELIS...	80 OMEG	10 $\pi^- p \rightarrow K^+ \pi^- (\Lambda, \Sigma)$
898.4 ± 1.4	1180	AGUILAR-...	78B HBC	0.76 $\bar{p} p \rightarrow K^\mp K_S^0 \pi^\pm$
894.9 ± 1.6		WICKLUND	78 ASPK	3,4,6 $K^\pm N \rightarrow (K\pi)^0 N$
897.6 ± 0.9		BOWLER	77 DBC	5.4 $K^+ d \rightarrow K^+ \pi^- pp$
895.5 ± 1.0	3600	MCCUBBIN	75 HBC	3.6 $K^- p \rightarrow K^- \pi^+ n$
897.1 ± 0.7	22k	<sup>1</sup> PALER	75 HBC	14.3 $K^- p \rightarrow (K\pi)^0 X$
896.0 ± 0.6	10k	FOX	74 RVUE	2 $K^- p \rightarrow K^- \pi^+ n$
896.0 ± 0.6		FOX	74 RVUE	2 $K^+ n \rightarrow K^+ \pi^- p$
896 ± 2		<sup>15</sup> MATISON	74 HBC	12 $K^+ p \rightarrow K^+ \pi^- \Delta$
896 ± 1	3186	LEWIS	73 HBC	2.1-2.7 $K^+ p \rightarrow K \pi \pi p$
894.0 ± 1.3		<sup>15</sup> LINGLIN	73 HBC	2-13 $K^+ p \rightarrow$ $K^+ \pi^- \pi^+ p$
898.4 ± 1.3	1700	<sup>2</sup> BUCHNER	72 DBC	4.6 $K^+ n \rightarrow K^+ \pi^- p$
897.9 ± 1.1	2934	<sup>2</sup> AGUILAR-...	71B HBC	3.9,4.6 $K^- p \rightarrow K^- \pi^+ n$
898.0 ± 0.7	5362	<sup>2</sup> AGUILAR-...	71B HBC	3.9,4.6 $K^- p \rightarrow$ $K^- \pi^+ \pi^- p$
895 ± 1	4300	<sup>3</sup> HABER	70 DBC	3 $K^- N \rightarrow K^- \pi^+ X$
893.7 ± 2.0	10k	DAVIS	69 HBC	12 $K^+ p \rightarrow K^+ \pi^- \pi^+ p$
894.7 ± 1.4	1040	<sup>2</sup> DAUBER	67B HBC	2.0 $K^- p \rightarrow K^- \pi^+ \pi^- p$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
894.9 ± 0.5 ± 0.7	14.4k	<sup>16</sup> MITCHELL	09A CLEO	$D_s^+ \rightarrow K^+ K^- \pi^+$
896.2 ± 0.3	20k	<sup>8</sup> AUBERT	07AK BABR	10.6 $e^+ e^- \rightarrow$ $K^{*0} K^\pm \pi^\mp \gamma$
900.7 ± 1.1	5900	BARTH	83 HBC	70 $K^+ p \rightarrow K^+ \pi^- X$



- 1 Inclusive reaction. Complicated background and phase-space effects.
- 2 Mass errors enlarged by us to  $\Gamma/\sqrt{N}$ . See note.
- 3 Number of events in peak reevaluated by us.
- 4 K-matrix pole.
- 5 From a partial wave amplitude analysis.
- 6 From a fit in the  $K_0^*(800) + K^*(892) + K^*(1410)$  model.
- 7 From the pole position of the  $K\pi$  vector form factor using EPIFANOV 07 and constraints from  $K_{J3}$  decays in ANTONELLI 10.
- 8 Systematic uncertainties not estimated.
- 9 From the pole position of the  $K\pi$  vector form factor in the complex  $s$ -plane and using EPIFANOV 07 data.
- 10 Reanalysis of EPIFANOV 07 using resonance chiral theory.
- 11 Calculated by us from the shift by  $4.7 \pm 0.9$  MeV (statistical uncertainty only) reported in BONVICINI 02 with respect to the world average value from PDG 00.
- 12 With mass and width of the  $K^*(1410)$  fixed at 1412 MeV and 227 MeV, respectively.
- 13 From the isobar model with a complex pole for the  $\kappa$ .
- 14 Fit to  $K\pi$  mass spectrum includes a non-resonant scalar component.
- 15 From pole extrapolation.
- 16 This value comes from a fit with  $\chi^2$  of 178/117.

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### $m_{K^*(892)^0} - m_{K^*(892)^\pm}$

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>6.7±1.2 OUR AVERAGE</b>					
7.7±1.7	2980	AGUILAR-...	78B HBC	±0	0.76 $\bar{p}p \rightarrow K^\mp K_S^0 \pi^\pm$
5.7±1.7	7338	AGUILAR-...	71B HBC	-0	3.9,4.6 $K^- p$
6.3±4.1	283	<sup>17</sup> BARASH	67B HBC		0.0 $\bar{p}p$

<sup>17</sup> Number of events in peak reevaluated by us.

### $K^*(892)$ RANGE PARAMETER

All from partial wave amplitude analyses.

VALUE (GeV <sup>-1</sup> )	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
3.96±0.54 <sup>+1.31</sup> / <sub>-0.90</sub>	18k	<sup>18</sup> LINK	05I FOCS	0	$D^+ \rightarrow K^- \pi^+ \mu^+ \nu_\mu$
3.4 ±0.7		ASTON	88 LASS	0	11 $K^- p \rightarrow K^- \pi^+ n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
12.1 ±3.2 ±3.0		BIRD	89 LASS	-	11 $K^- p \rightarrow \bar{K}^0 \pi^- p$

<sup>18</sup> Fit to  $K\pi$  mass spectrum includes a non-resonant scalar component.

### $K^*(892)$ WIDTH

#### CHARGED ONLY, HADROPRODUCED

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>50.8±0.9 OUR FIT</b>					
<b>50.8±0.9 OUR AVERAGE</b>					
49 ±2	5840	BAUBILLIER	84B HBC	-	8.25 $K^- p \rightarrow \bar{K}^0 \pi^- p$
56 ±4		NAPIER	84 SPEC	-	200 $\pi^- p \rightarrow 2K_S^0 X$
51 ±2	4100	TOAFF	81 HBC	-	6.5 $K^- p \rightarrow \bar{K}^0 \pi^- p$
50.5±5.6		AJINENKO	80 HBC	+	32 $K^+ p \rightarrow K^0 \pi^+ X$
45.8±3.6	1800	AGUILAR-...	78B HBC	±	0.76 $\bar{p}p \rightarrow K^\mp K_S^0 \pi^\pm$
52.0±2.5	6706	<sup>19</sup> COOPER	78 HBC	±	0.76 $\bar{p}p \rightarrow (K\pi)^\pm X$
52.1±2.2	9000	<sup>20</sup> PALER	75 HBC	-	14.3 $K^- p \rightarrow (K\pi)^- X$
46.3±6.7	765	<sup>19</sup> CLARK	73 HBC	-	3.13 $K^- p \rightarrow \bar{K}^0 \pi^- p$
48.2±5.7	1150	<sup>19,21</sup> CLARK	73 HBC	-	3.3 $K^- p \rightarrow \bar{K}^0 \pi^- p$
54.3±3.3	4404	<sup>19</sup> AGUILAR-...	71B HBC	-	3.9,4.6 $K^- p \rightarrow (K\pi)^- p$
46 ±5	1700	<sup>19,21</sup> WOJCICKI	64 HBC	-	1.7 $K^- p \rightarrow \bar{K}^0 \pi^- p$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
54.8±1.7	27k	<sup>22</sup> ABELE	99D CBAR	±	0.0 $\bar{p}p \rightarrow K^+ K^- \pi^0$
45.2±1 ±2	79.7±0.8k	<sup>23</sup> BIRD	89 LASS	-	11 $K^- p \rightarrow \bar{K}^0 \pi^- p$
42.8±7.1	3700	BARTH	83 HBC	+	70 $K^+ p \rightarrow K^0 \pi^+ X$
64.0±9.2	800	<sup>19,21</sup> CLELAND	82 SPEC	+	30 $K^+ p \rightarrow K_S^0 \pi^+ p$
62.0±4.4	3200	<sup>19,21</sup> CLELAND	82 SPEC	+	50 $K^+ p \rightarrow K_S^0 \pi^+ p$
55 ±4	3600	<sup>19,21</sup> CLELAND	82 SPEC	-	50 $K^+ p \rightarrow K_S^0 \pi^- p$
62.6±3.8	380	DELFOSE	81 SPEC	+	50 $K^\pm p \rightarrow K^\pm \pi^0 p$
50.5±3.9	187	DELFOSE	81 SPEC	-	50 $K^\pm p \rightarrow K^\pm \pi^0 p$

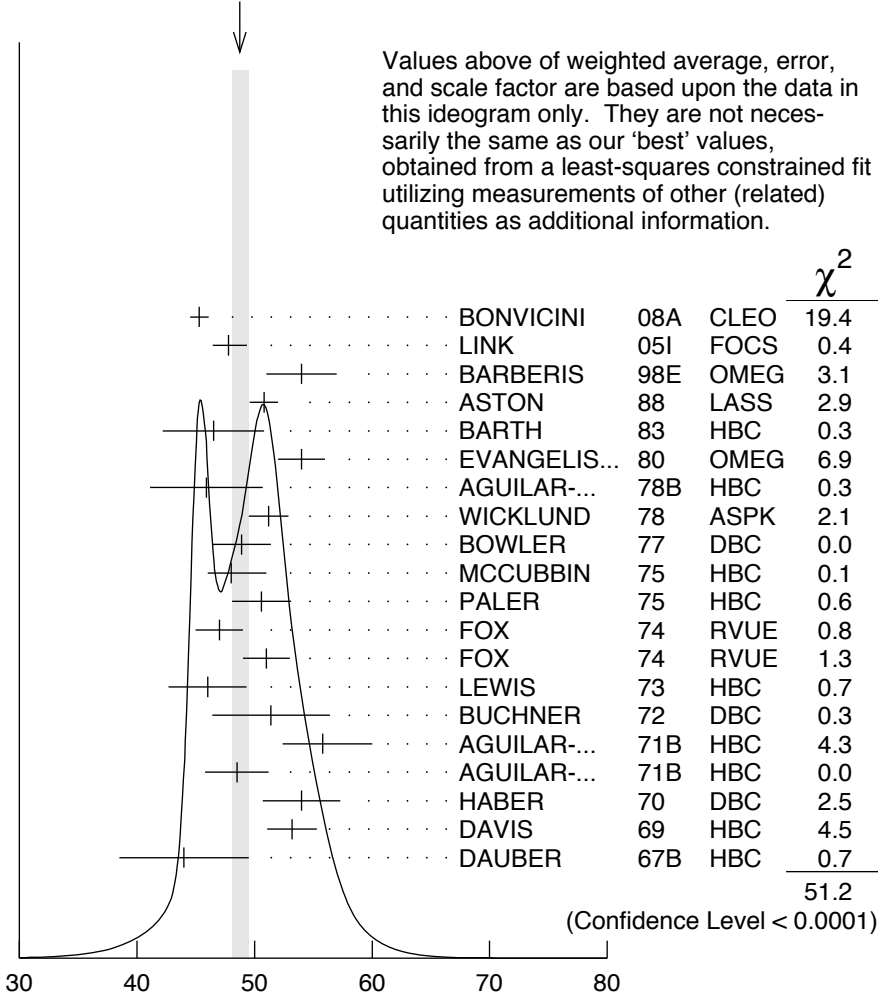
## CHARGED ONLY, PRODUCED IN $\tau$ LEPTON DECAYS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>46.2±0.6±1.2</b>	53k	<sup>24</sup> EPIFANOV	07	BELL $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
46.5±1.1		<sup>25</sup> BOITO	10	RVUE $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
46.2±0.4		<sup>26,27</sup> BOITO	09	RVUE $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
47.5±0.4		<sup>26,28</sup> JAMIN	08	RVUE $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$
55 ±8		<sup>29</sup> BARATE	99R	ALEP $\tau^- \rightarrow K^- \pi^0 \nu_\tau$

## NEUTRAL ONLY

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>48.7 ±0.8 OUR FIT</b>	Error includes scale factor of 1.7.				
<b>48.7 ±0.7 OUR AVERAGE</b>	Error includes scale factor of 1.6. See the ideogram below.				
45.3 ±0.5 ±0.6	141k	<sup>30</sup> BONVICINI	08A	CLEO	$D^+ \rightarrow K^- \pi^+ \pi^+$
47.79±0.86 <sup>+1.32</sup> <sub>-1.06</sub>	18k	<sup>31</sup> LINK	05I	FOCS	0 $D^+ \rightarrow K^- \pi^+ \mu^+ \nu_\mu$
54 ±3		BARBERIS	98E	OMEG	450 $pp \rightarrow p_f p_s K^* \bar{K}^*$
50.8 ±0.8 ±0.9		ASTON	88	LASS	0 11 $K^- p \rightarrow K^- \pi^+ n$
46.5 ±4.3	5900	BARTH	83	HBC	0 70 $K^+ p \rightarrow K^+ \pi^- X$
54 ±2	28k	EVANGELIS..	80	OMEG	0 10 $\pi^- p \rightarrow K^+ \pi^- (\Lambda, \Sigma)$
45.9 ±4.8	1180	AGUILAR-...	78B	HBC	0 0.76 $\bar{p} p \rightarrow K^\mp K_S^0 \pi^\pm$
51.2 ±1.7		WICKLUND	78	ASPK	0 3,4,6 $K^\pm N \rightarrow (K\pi)^0 N$
48.9 ±2.5		BOWLER	77	DBC	0 5.4 $K^+ d \rightarrow K^+ \pi^- pp$
48 <sup>+3</sup> <sub>-2</sub>	3600	MCCUBBIN	75	HBC	0 3.6 $K^- p \rightarrow K^- \pi^+ n$
50.6 ±2.5	22k	<sup>20</sup> PALER	75	HBC	0 14.3 $K^- p \rightarrow (K\pi)^0 X$
47 ±2	10k	FOX	74	RVUE	0 2 $K^- p \rightarrow K^- \pi^+ n$
51 ±2		FOX	74	RVUE	0 2 $K^+ n \rightarrow K^+ \pi^- p$
46.0 ±3.3	3186	<sup>19</sup> LEWIS	73	HBC	0 2.1-2.7 $K^+ p \rightarrow K\pi\pi p$
51.4 ±5.0	1700	<sup>19</sup> BUCHNER	72	DBC	0 4.6 $K^+ n \rightarrow K^+ \pi^- p$
55.8 <sup>+4.2</sup> <sub>-3.4</sub>	2934	<sup>19</sup> AGUILAR-...	71B	HBC	0 3.9,4.6 $K^- p \rightarrow K^- \pi^+ n$
48.5 ±2.7	5362	AGUILAR-...	71B	HBC	0 3.9,4.6 $K^- p \rightarrow$ $K^- \pi^+ \pi^- p$
54.0 ±3.3	4300	<sup>19,21</sup> HABER	70	DBC	0 3 $K^- N \rightarrow K^- \pi^+ X$
53.2 ±2.1	10k	<sup>19</sup> DAVIS	69	HBC	0 12 $K^+ p \rightarrow K^+ \pi^- \pi^+ p$
44 ±5.5	1040	<sup>19</sup> DAUBER	67B	HBC	0 2.0 $K^- p \rightarrow K^- \pi^+ \pi^- p$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●					
45.7 ±1.1 ±0.5	14.4k	<sup>32</sup> MITCHELL	09A	CLEO	$D_s^+ \rightarrow K^+ K^- \pi^+$
50.6 ±0.9	20k	<sup>26</sup> AUBERT	07AK	BABR	10.6 $e^+ e^- \rightarrow$ $K^{*0} K^\pm \pi^\mp \gamma$

WEIGHTED AVERAGE  
 $48.7 \pm 0.7$  (Error scaled by 1.6)



NEUTRAL ONLY (MeV)

- 19 Width errors enlarged by us to  $4 \times \Gamma / \sqrt{N}$ ; see note.
- 20 Inclusive reaction. Complicated background and phase-space effects.
- 21 Number of events in peak reevaluated by us.
- 22 K-matrix pole.
- 23 From a partial wave amplitude analysis.
- 24 From a fit in the  $K_0^*(800) + K^*(892) + K^*(1410)$  model.
- 25 From the pole position of the  $K\pi$  vector form factor using EPIFANOV 07 and constraints from  $K_{J3}$  decays in ANTONELLI 10.
- 26 Systematic uncertainties not estimated.
- 27 From the pole position of the  $K\pi$  vector form factor in the complex  $s$ -plane and using EPIFANOV 07 data.
- 28 Reanalysis of EPIFANOV 07 using resonance chiral theory.
- 29 With mass and width of the  $K^*(1410)$  fixed at 1412 MeV and 227 MeV, respectively.
- 30 From the isobar model with a complex pole for the  $\kappa$ .
- 31 Fit to  $K\pi$  mass spectrum includes a non-resonant scalar component.
- 32 This value comes from a fit with  $\chi^2$  of 178/117.

## **$K^*(892)$ DECAY MODES**

Mode	Fraction ( $\Gamma_i/\Gamma$ )	Confidence level
$\Gamma_1$ $K\pi$	$\sim 100$	%
$\Gamma_2$ $(K\pi)^\pm$	$(99.901 \pm 0.009)$	%
$\Gamma_3$ $(K\pi)^0$	$(99.761 \pm 0.021)$	%
$\Gamma_4$ $K^0\gamma$	$(2.39 \pm 0.21) \times 10^{-3}$	
$\Gamma_5$ $K^\pm\gamma$	$(9.9 \pm 0.9) \times 10^{-4}$	
$\Gamma_6$ $K\pi\pi$	$< 7$	$\times 10^{-4}$ 95%

### **CONSTRAINED FIT INFORMATION**

An overall fit to the total width and a partial width uses 13 measurements and one constraint to determine 3 parameters. The overall fit has a  $\chi^2 = 7.8$  for 11 degrees of freedom.

The following *off-diagonal* array elements are the correlation coefficients  $\langle \delta p_i \delta p_j \rangle / (\delta p_i \cdot \delta p_j)$ , in percent, from the fit to parameters  $p_i$ , including the branching fractions,  $x_i \equiv \Gamma_i / \Gamma_{\text{total}}$ . The fit constrains the  $x_i$  whose labels appear in this array to sum to one.

$$\begin{array}{c}
 x_5 \\
 \Gamma
 \end{array}
 \begin{array}{|c|}
 \hline
 -100 \\
 \hline
 19 \quad -19 \\
 \hline
 \end{array}
 \begin{array}{c}
 \\
 x_2 \quad x_5
 \end{array}$$

Mode	Rate (MeV)
$\Gamma_2$ $(K\pi)^\pm$	$50.7 \pm 0.9$
$\Gamma_5$ $K^\pm\gamma$	$0.050 \pm 0.005$

### **CONSTRAINED FIT INFORMATION**

An overall fit to the total width and a partial width uses 21 measurements and one constraint to determine 3 parameters. The overall fit has a  $\chi^2 = 51.2$  for 19 degrees of freedom.

The following *off-diagonal* array elements are the correlation coefficients  $\langle \delta p_i \delta p_j \rangle / (\delta p_i \cdot \delta p_j)$ , in percent, from the fit to parameters  $p_i$ , including the branching fractions,  $x_i \equiv \Gamma_i / \Gamma_{\text{total}}$ . The fit constrains the  $x_i$  whose labels appear in this array to sum to one.

$$\begin{array}{c}
 x_4 \\
 \Gamma
 \end{array}
 \begin{array}{|c|}
 \hline
 -100 \\
 \hline
 18 \quad -18 \\
 \hline
 \end{array}
 \begin{array}{c}
 \\
 x_3 \quad x_4
 \end{array}$$

Mode	Rate (MeV)	Scale factor
$\Gamma_3$ $(K\pi)^0$	$48.6 \pm 0.8$	1.7

$\Gamma_4 \quad K^0 \gamma \quad 0.117 \pm 0.010$

### $K^*(892)$ PARTIAL WIDTHS

$\Gamma(K^0 \gamma) \quad \Gamma_4$

VALUE (keV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>117 ± 10 OUR FIT</b>					
<b>116.5 ± 9.9</b>	584	CARLSMITH	86	SPEC	0 $K_L^0 A \rightarrow K_S^0 \pi^0 A$

$\Gamma(K^\pm \gamma) \quad \Gamma_5$

VALUE (keV)	DOCUMENT ID	TECN	CHG	COMMENT
<b>50 ± 5 OUR FIT</b>				
<b>50 ± 5 OUR AVERAGE</b>				
48 ± 11	BERG	83	SPEC	- 156 $K^- A \rightarrow \bar{K} \pi A$
51 ± 5	CHANDLEE	83	SPEC	+ 200 $K^+ A \rightarrow K \pi A$

### $K^*(892)$ BRANCHING RATIOS

$\Gamma(K^0 \gamma) / \Gamma_{\text{total}} \quad \Gamma_4 / \Gamma$

VALUE (units $10^{-3}$ )	DOCUMENT ID	TECN	CHG	COMMENT
<b>2.39 ± 0.21 OUR FIT</b>				
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1.5 ± 0.7	CARITHERS	75B	CNTR	0 8-16 $\bar{K}^0 A$

$\Gamma(K^\pm \gamma) / \Gamma_{\text{total}} \quad \Gamma_5 / \Gamma$

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	CHG	COMMENT
<b>0.99 ± 0.09 OUR FIT</b>					
• • • We do not use the following data for averages, fits, limits, etc. • • •					
< 1.6	95	BEMPORAD	73	CNTR	+ 10-16 $K^+ A$

$\Gamma(K \pi \pi) / \Gamma((K \pi)^\pm) \quad \Gamma_6 / \Gamma_2$

VALUE	CL%	DOCUMENT ID	TECN	CHG	COMMENT
<b>&lt; 7 × 10<sup>-4</sup></b>	95	JONGEJANS	78	HBC	4 $K^- p \rightarrow p \bar{K}^0 2\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
< 20 × 10 <sup>-4</sup>		WOJCICKI	64	HBC	- 1.7 $K^- p \rightarrow \bar{K}^0 \pi^- p$

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