

$K^*(892)$

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

 $K^*(892)$ MASS**CHARGED ONLY, HADROPRODUCED**

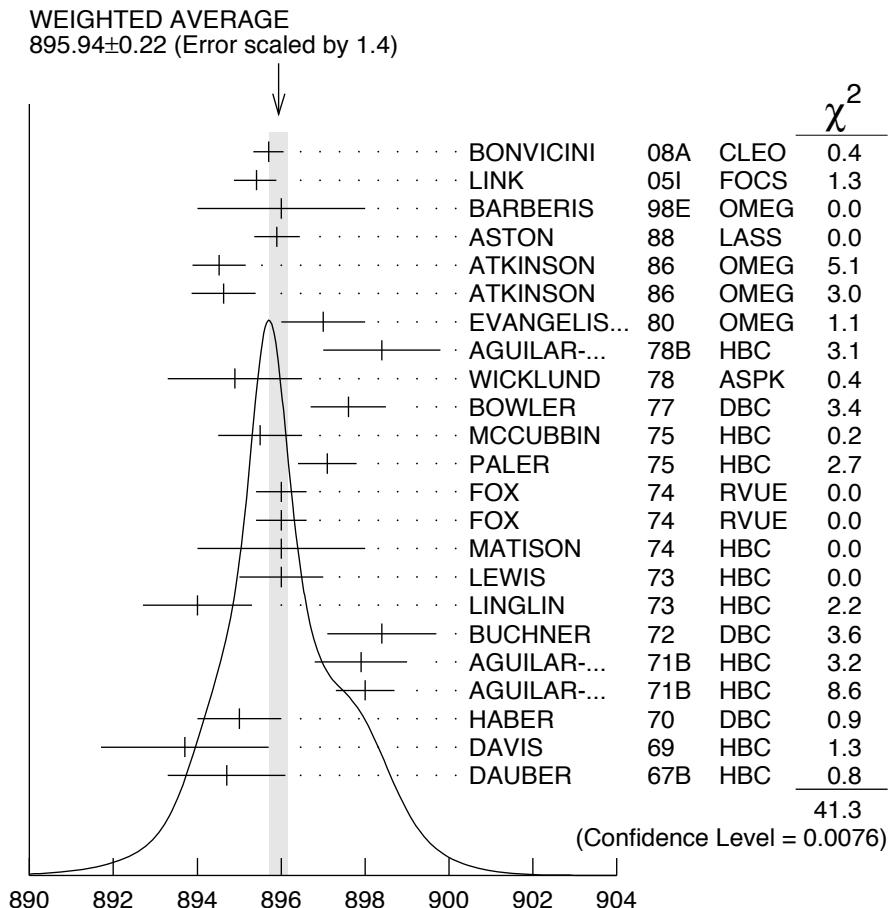
| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|--|----------------|-----------------------------|------|-------|---|
| 891.66 ± 0.26 OUR AVERAGE | | | | | |
| 892.6 ± 0.5 | 5840 | BAUBILLIER 84B | HBC | - | $8.25 K^- p \rightarrow \bar{K}^0 \pi^- p$ |
| 888 ± 3 | | NAPIER 84 | SPEC | + | $200 \pi^- p \rightarrow 2K_S^0 X$ |
| 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 | \pm | $12 \bar{p}p \rightarrow (K\pi)^\pm X$ |
| 891.7 ± 0.6 | 6706 | COOPER 78 | HBC | \pm | $0.76 \bar{p}p \rightarrow (K\pi)^\pm X$ |
| 891.9 ± 0.7 | 9000 | ¹ 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 | \pm | $1.2 \bar{p}p \rightarrow (K^0 \pi)^\pm K^\mp$ |
| 889 ± 3.0 | 600 | BARLOW 67 | HBC | \pm | $1.2 \bar{p}p \rightarrow (K^0 \pi)^\pm K\pi$ |
| 891 ± 2.3 | 620 | ² DEBAERE 67B | HBC | + | $3.5 K^+ p \rightarrow K^0 \pi^+ p$ |
| 891.0 ± 1.2 | 1700 | ³ 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 | ⁴ ABELE 99D | CBAR | \pm | $0.0 \bar{p}p \rightarrow K^+ K^- \pi^0$ |
| 890.4 ± 0.2 ± 0.5 | 80 ± 0.8 k | ⁵ BIRD 89 | LASS | - | $11 K^- p \rightarrow \bar{K}^0 \pi^- p$ |
| 890.0 ± 2.3 | 800 | ^{2,3} CLELAND 82 | SPEC | + | $30 K^+ p \rightarrow K_S^0 \pi^+ p$ |
| 896.0 ± 1.1 | 3200 | ^{2,3} CLELAND 82 | SPEC | + | $50 K^+ p \rightarrow K_S^0 \pi^+ p$ |
| 893 ± 1 | 3600 | ^{2,3} CLELAND 82 | SPEC | - | $50 K^+ p \rightarrow K_S^0 \pi^- p$ |
| 896.0 ± 1.9 | 380 | DELFOSSE 81 | SPEC | + | $50 K^\pm p \rightarrow K^\pm \pi^0 p$ |
| 886.0 ± 2.3 | 187 | DELFOSSE 81 | SPEC | - | $50 K^\pm p \rightarrow K^\pm \pi^0 p$ |
| 894.2 ± 2.0 | 765 | ² CLARK 73 | HBC | - | $3.13 K^- p \rightarrow \bar{K}^0 \pi^- p$ |
| 894.3 ± 1.5 | 1150 | ^{2,3} CLARK 73 | HBC | - | $3.3 K^- p \rightarrow \bar{K}^0 \pi^- p$ |
| 892.0 ± 2.6 | 341 | ² SCHWEING... 68 | HBC | - | $5.5 K^- p \rightarrow \bar{K}^0 \pi^- p$ |

CHARGED ONLY, PRODUCED IN τ LEPTON DECAYS

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | COMMENT |
|--|-------|----------------------------|------|---|
| $895.47 \pm 0.20 \pm 0.74$ | 53k | ⁶ 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 ± 0.9 | | ^{7,8} BOITO 09 | RVUE | $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$ |
| 895.3 ± 0.2 | | ^{7,9} JAMIN 08 | RVUE | $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$ |
| 896.4 ± 0.9 | 11970 | ¹⁰ BONVICINI 02 | CLEO | $\tau^- \rightarrow K^- \pi^0 \nu_\tau$ |
| 895 ± 2 | | ¹¹ BARATE 99R | ALEP | $\tau^- \rightarrow K^- \pi^0 \nu_\tau$ |

NEUTRAL ONLY

| VALUE (MeV) | EVTs | DOCUMENT ID | TECN | COMMENT | |
|---|-------|---|-----------|--|--|
| 895.94±0.22 OUR AVERAGE | | Error includes scale factor of 1.4. See the ideogram below. | | | |
| 895.7 ±0.2 ±0.3 | 141k | 12 BONVICINI | 08A CLEO | $D^+ \rightarrow K^- \pi^+ \pi^+$ | |
| 895.41±0.32 ^{+0.35} _{-0.43} | 18k | 13 LINK | 05I FOCS | $D^+ \rightarrow K^- \pi^+ \mu^+ \nu_\mu$ | |
| 896 ±2 | | BARBERIS | 98E OMEG | $450 \text{ pp} \rightarrow p_f p_s K^* \bar{K}^*$ | |
| 895.9 ±0.5 ±0.2 | | ASTON | 88 LASS | $11 \text{ K}^- p \rightarrow K^- \pi^+ n$ | |
| 894.52±0.63 | 25k | 1 ATKINSON | 86 OMEG | $20\text{--}70 \gamma p$ | |
| 894.63±0.76 | 20k | 1 ATKINSON | 86 OMEG | $20\text{--}70 \gamma p$ | |
| 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 | 1 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 | | 14 MATISON | 74 HBC | $12 K^+ p \rightarrow K^+ \pi^- \Delta$ | |
| 896 ±1 | 3186 | LEWIS | 73 HBC | $2.1\text{--}2.7 K^+ p \rightarrow K\pi\pi p$ | |
| 894.0 ±1.3 | | 14 LINGLIN | 73 HBC | $2\text{--}13 K^+ p \rightarrow K^+ \pi^- \pi^+ p$ | |
| 898.4 ±1.3 | 1700 | 2 BUCHNER | 72 DBC | $4.6 K^+ n \rightarrow K^+ \pi^- p$ | |
| 897.9 ±1.1 | 2934 | 2 AGUILAR... | 71B HBC | $3.9,4.6 K^- p \rightarrow K^- \pi^+ n$ | |
| 898.0 ±0.7 | 5362 | 2 AGUILAR... | 71B HBC | $3.9,4.6 K^- p \rightarrow K^- \pi^+ \pi^- p$ | |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| 894.9 ±0.5 ±0.7 | 14.4k | 15 MITCHELL | 09A CLEO | $D_s^+ \rightarrow K^+ K^- \pi^+$ | |
| 896.2 ±0.3 | 20k | 7 AUBERT | 07AK BABR | $10.6 e^+ e^- \rightarrow K^{*0} K^\pm \pi^\mp \gamma$ | |
| 900.7 ±1.1 | 5900 | BARTH | 83 HBC | $70 K^+ p \rightarrow K^+ \pi^- X$ | |



$K^*(892)^0$ mass (MeV)

- 1 Inclusive reaction. Complicated background and phase-space effects.
- 2 Mass errors enlarged by us to Γ/\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 Systematic uncertainties not estimated.
- 8 From the pole position of the $K\pi$ vector form factor in the complex s -plane and using EPIFANOV 07 data.
- 9 Reanalysis of EPIFANOV 07 using resonance chiral theory.
- 10 Calculated by us from the shift by 4.7 ± 0.9 MeV (statistical uncertainty only) reported in BONVICINI 02 with respect to the world average value from PDG 00.
- 11 With mass and width of the $K^*(1410)$ fixed at 1412 MeV and 227 MeV, respectively.
- 12 From the isobar model with a complex pole for the κ .
- 13 Fit to $K\pi$ mass spectrum includes a non-resonant scalar component.
- 14 From pole extrapolation.
- 15 This value comes from a fit with χ^2 of 178/117.

A REVIEW GOES HERE – Check our WWW List of Reviews

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

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|----------------------------|------|-------------|---------|-----|---|
| 6.7±1.2 OUR AVERAGE | | | | | |
| 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 | 16 BARASH | 67B HBC | | 0.0 $\bar{p}p$ |

16 Number of events in peak reevaluated by us.

 $K^*(892)$ RANGE PARAMETER

All from partial wave amplitude analyses.

| VALUE (GeV $^{-1}$) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|---|------|-------------|----------|-----|---|
| 3.96±0.54 $^{+1.31}_{-0.90}$ | 18k | 17 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 $K^- p \rightarrow \bar{K}^0 \pi^- p$ |

17 Fit to $K\pi$ mass spectrum includes a non-resonant scalar component. **$K^*(892)$ WIDTH****CHARGED ONLY, HADROPRODUCED**

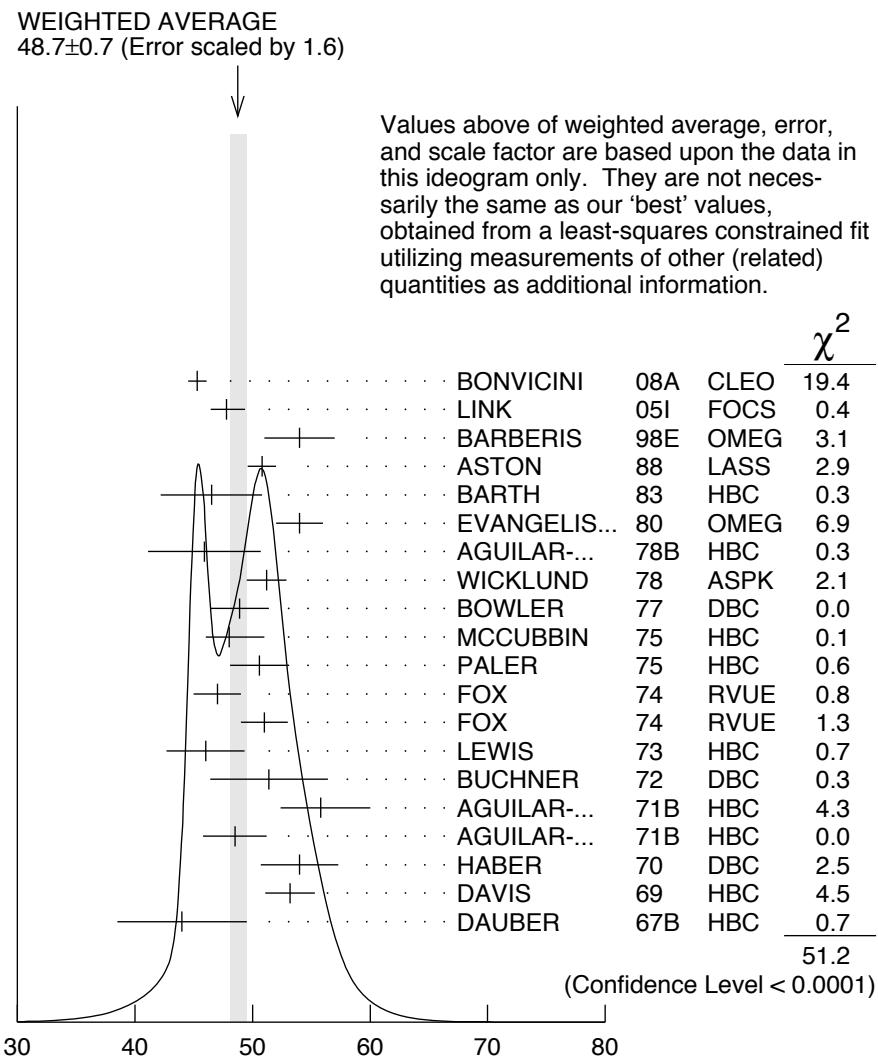
| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|---|-----------|----------------|----------|-----|---|
| 50.8±0.9 OUR FIT | | | | | |
| 50.8±0.9 OUR AVERAGE | | | | | |
| 49 ±2 | 5840 | BAUBILLIER | 84B HBC | - | 8.25 $K^- p \rightarrow \bar{K}^0 \pi^- p$ |
| 56 ±4 | | NAPIER | 84 SPEC | - | 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 | 18 COOPER | 78 HBC | ± | 0.76 $\bar{p}p \rightarrow (K\pi)^{\pm} X$ |
| 52.1±2.2 | 9000 | 19 PALER | 75 HBC | - | 14.3 $K^- p \rightarrow (K\pi)^-$ X |
| 46.3±6.7 | 765 | 18 CLARK | 73 HBC | - | 3.13 $K^- p \rightarrow \bar{K}^0 \pi^- p$ |
| 48.2±5.7 | 1150 | 18,20 CLARK | 73 HBC | - | 3.3 $K^- p \rightarrow \bar{K}^0 \pi^- p$ |
| 54.3±3.3 | 4404 | 18 AGUILAR-... | 71B HBC | - | 3.9,4.6 $K^- p \rightarrow (K\pi)^-$ p |
| 46 ±5 | 1700 | 18,20 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 | 21 ABELE | 99D CBAR | ± | 0.0 $\bar{p}p \rightarrow K^+ K^- \pi^0$ |
| 45.2±1 ±2 | 79.7±0.8k | 22 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 | 18,20 CLELAND | 82 SPEC | + | 30 $K^+ p \rightarrow K_S^0 \pi^+ p$ |
| 62.0±4.4 | 3200 | 18,20 CLELAND | 82 SPEC | + | 50 $K^+ p \rightarrow K_S^0 \pi^+ p$ |
| 55 ±4 | 3600 | 18,20 CLELAND | 82 SPEC | - | 50 $K^+ p \rightarrow K_S^0 \pi^- p$ |
| 62.6±3.8 | 380 | DELFOSSE | 81 SPEC | + | 50 $K^{\pm} p \rightarrow K^{\pm} \pi^0 p$ |
| 50.5±3.9 | 187 | DELFOSSE | 81 SPEC | - | 50 $K^{\pm} p \rightarrow K^{\pm} \pi^0 p$ |

CHARGED ONLY, PRODUCED IN τ LEPTON DECAYS

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | COMMENT |
|--|-------------|-------------|------|--|
| 46.2±0.6±1.2 | 53k | 23 EPIFANOV | 07 | BELL $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 46.2±0.4 | 24,25 BOITO | 09 | RVUE | $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$ |
| 47.5±0.4 | 24,26 JAMIN | 08 | RVUE | $\tau^- \rightarrow K_S^0 \pi^- \nu_\tau$ |
| 55 ± 8 | 27 BARATE | 99R | ALEP | $\tau^- \rightarrow K^- \pi^0 \nu_\tau$ |

NEUTRAL ONLY

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG COMMENT |
|--|-------|-------------------------------------|-----------|--|
| 48.7 ±0.8 OUR FIT | | Error includes scale factor of 1.7. | | |
| 48.7 ±0.7 OUR AVERAGE Error includes scale factor of 1.6. See the ideogram below. | | | | |
| 45.3 ± 0.5 ± 0.6 | 141k | 28 BONVICINI | 08A CLEO | $D^+ \rightarrow K^- \pi^+ \pi^+$ |
| 47.79±0.86 ^{+1.32} _{-1.06} | 18k | 29 LINK | 05I FOCS | $D^+ \rightarrow K^- \pi^+ \mu^+ \nu_\mu$ |
| 54 ± 3 | | BARBERIS | 98E OMEG | $450 pp \rightarrow p_f p_s K^* \bar{K}^*$ |
| 50.8 ± 0.8 ± 0.9 | | ASTON | 88 LASS | $11 K^- p \rightarrow K^- \pi^+ n$ |
| 46.5 ± 4.3 | 5900 | BARTH | 83 HBC | $70 K^+ p \rightarrow K^+ \pi^- X$ |
| 54 ± 2 | 28k | EVANGELIS...80 | OMEG 0 | $10 \pi^- p \rightarrow K^+ \pi^- (\Lambda, \Sigma)$ |
| 45.9 ± 4.8 | 1180 | AGUILAR-... | 78B HBC | $0.76 \bar{p} p \rightarrow K^\mp K_S^0 \pi^\pm$ |
| 51.2 ± 1.7 | | WICKLUND | 78 ASPK | $3,4,6 K^\pm N \rightarrow (K\pi)^0 N$ |
| 48.9 ± 2.5 | | BOWLER | 77 DBC | $5.4 K^+ d \rightarrow K^+ \pi^- pp$ |
| 48 ± 3 | 3600 | MCCUBBIN | 75 HBC | $3.6 K^- p \rightarrow K^- \pi^+ n$ |
| 50.6 ± 2.5 | 22k | 19 PALER | 75 HBC | $14.3 K^- p \rightarrow (K\pi)^0 X$ |
| 47 ± 2 | 10k | FOX | 74 RVUE | $2 K^- p \rightarrow K^- \pi^+ n$ |
| 51 ± 2 | | FOX | 74 RVUE | $2 K^+ n \rightarrow K^+ \pi^- p$ |
| 46.0 ± 3.3 | 3186 | 18 LEWIS | 73 HBC | $2.1-2.7 K^+ p \rightarrow K\pi\pi p$ |
| 51.4 ± 5.0 | 1700 | 18 BUCHNER | 72 DBC | $4.6 K^+ n \rightarrow K^+ \pi^- p$ |
| 55.8 ± 4.2 | 2934 | 18 AGUILAR-... | 71B HBC | $3.9,4.6 K^- p \rightarrow K^- \pi^+ n$ |
| 48.5 ± 2.7 | 5362 | AGUILAR-... | 71B HBC | $3.9,4.6 K^- p \rightarrow K^- \pi^+ \pi^- p$ |
| 54.0 ± 3.3 | 4300 | 18,20 HABER | 70 DBC | $3 K^- N \rightarrow K^- \pi^+ X$ |
| 53.2 ± 2.1 | 10k | 18 DAVIS | 69 HBC | $12 K^+ p \rightarrow K^+ \pi^- \pi^+ p$ |
| 44 ± 5.5 | 1040 | 18 DAUBER | 67B HBC | $2.0 K^- p \rightarrow K^- \pi^+ \pi^- p$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 45.7 ± 1.1 ± 0.5 | 14.4k | 30 MITCHELL | 09A CLEO | $D_s^+ \rightarrow K^+ K^- \pi^+$ |
| 50.6 ± 0.9 | 20k | 24 AUBERT | 07AK BABR | $10.6 e^+ e^- \rightarrow K^{*0} K^\pm \pi^\mp \gamma$ |



NEUTRAL ONLY (MeV)

¹⁸ Width errors enlarged by us to $4 \times \Gamma/\sqrt{N}$; see note.

¹⁹ Inclusive reaction. Complicated background and phase-space effects.

²⁰ Number of events in peak reevaluated by us.

²¹ K-matrix pole.

²² From a partial wave amplitude analysis.

²³ From a fit in the $K_0^*(800) + K^*(892) + K^*(1410)$ model.

²⁴ Systematic uncertainties not estimated.

²⁵ From the pole position of the $K\pi$ vector form factor in the complex s -plane and using EPIFANOV 07 data.

²⁶ Reanalysis of EPIFANOV 07 using resonance chiral theory.

²⁷ With mass and width of the $K^*(1410)$ fixed at 1412 MeV and 227 MeV, respectively.

²⁸ From the isobar model with a complex pole for the κ .

²⁹ Fit to $K\pi$ mass spectrum includes a non-resonant scalar component.

³⁰ This value comes from a fit with χ^2 of 178/117.

$K^*(892)$ DECAY MODES

| Mode | Fraction (Γ_i/Γ) | Confidence level |
|------------------------------|----------------------------------|------------------|
| $\Gamma_1 \quad K\pi$ | ~ 100 % | |
| $\Gamma_2 \quad (K\pi)^\pm$ | (99.901 ± 0.009) % | |
| $\Gamma_3 \quad (K\pi)^0$ | (99.761 ± 0.021) % | |
| $\Gamma_4 \quad K^0\gamma$ | $(2.39 \pm 0.21) \times 10^{-3}$ | |
| $\Gamma_5 \quad K^\pm\gamma$ | $(9.9 \pm 0.9) \times 10^{-4}$ | |
| $\Gamma_6 \quad K\pi\pi$ | $< 7 \times 10^{-4}$ | 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.

$$\begin{matrix} & x_5 \\ \Gamma & \begin{bmatrix} & -100 \\ & 19 & -19 \\ x_2 & & x_5 \end{bmatrix} \end{matrix}$$

| Mode | Rate (MeV) |
|------------------------------|-------------------|
| $\Gamma_2 \quad (K\pi)^\pm$ | 50.7 ± 0.9 |
| $\Gamma_5 \quad K^\pm\gamma$ | 0.050 ± 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.

$$\begin{matrix} & x_4 \\ \Gamma & \begin{bmatrix} & -100 \\ & 18 & -18 \\ x_3 & & x_4 \end{bmatrix} \end{matrix}$$

| Mode | Rate (MeV) | Scale factor |
|---------------------------|----------------|--------------|
| $\Gamma_3 \quad (K\pi)^0$ | 48.6 ± 0.8 | 1.7 |

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

$K^*(892)$ PARTIAL WIDTHS

$\Gamma(K^0 \gamma)$

| VALUE (keV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT | Γ_4 |
|-------------------------|------|--------------|--------|-----|-------------------------------------|------------|
| 117 ± 10 OUR FIT | | | | | | |
| 116.5 ± 9.9 | 584 | CARLSMITH 86 | SPEC 0 | | $K_L^0 A \rightarrow K_S^0 \pi^0 A$ | |

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

| VALUE (keV) | DOCUMENT ID | TECN | CHG | COMMENT | Γ_5 |
|---------------------------|-------------|--------|-----|---------------------------------------|------------|
| 50 ± 5 OUR FIT | | | | | |
| 50 ± 5 OUR AVERAGE | | | | | |
| 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

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

| VALUE (units 10^{-3}) | DOCUMENT ID | TECN | CHG | COMMENT | Γ_4/Γ |
|----------------------------|-------------|------|-----|---------|-------------------|
| 2.39 ± 0.21 OUR FIT | | | | | |

• • • We do not use the following data for averages, fits, limits, etc. • • •

1.5 ± 0.7 CARITHERS 75B CNTR 0 8–16 $\bar{K}^0 A$

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

| VALUE (units 10^{-3}) | CL% | DOCUMENT ID | TECN | CHG | COMMENT | Γ_5/Γ |
|----------------------------|-----|-------------|------|-----|---------|-------------------|
| 0.99 ± 0.09 OUR FIT | | | | | | |

• • • We do not use the following data for averages, fits, limits, etc. • • •

<1.6 95 BEMPORAD 73 CNTR + 10–16 $K^+ A$

$\Gamma(K\pi\pi)/\Gamma((K\pi)^\pm)$

| VALUE | CL% | DOCUMENT ID | TECN | CHG | COMMENT | Γ_6/Γ_2 |
|----------------------|-----|--------------|------|-----|---|---------------------|
| < 7×10^{-4} | 95 | JONGEJANS 78 | HBC | | $4 K^- p \rightarrow p \bar{K}^0 \pi^- \pi^+$ | |

• • • We do not use the following data for averages, fits, limits, etc. • • •

< 20×10^{-4} WOJCICKI 64 HBC – 1.7 $K^- p \rightarrow \bar{K}^0 \pi^- p$

$K^*(892)$ REFERENCES

| | | | |
|---------------|---------------|------------------------------------|--------------------------|
| BOITO 09 | EPJ C59 821 | D.R. Boito, R. Escribano, M. Jamin | |
| MITCHELL 09A | PR D79 072008 | R.E. Mitchell <i>et al.</i> | (CLEO Collab.) |
| BONVICINI 08A | PR D78 052001 | G. Bonvicini <i>et al.</i> | (CLEO Collab.) |
| JAMIN 08 | PL B664 78 | M. Jamin, A. Pich, J. Portoles | |
| AUBERT 07AK | PR D76 012008 | B. Aubert <i>et al.</i> | (BABAR Collab.) |
| EPIFANOV 07 | PL B654 65 | D. Epifanov <i>et al.</i> | (BELLE Collab.) |
| LINK 05I | PL B621 72 | J.M. Link <i>et al.</i> | (FNAL FOCUS Collab.) |
| BONVICINI 02 | PRL 88 111803 | G. Bonvicini <i>et al.</i> | (CLEO Collab.) |
| PDG 00 | EPJ C15 1 | D.E. Groom <i>et al.</i> | |
| ABELE 99D | PL B468 178 | A. Abele <i>et al.</i> | (Crystal Barrel Collab.) |
| BARATE 99R | EPJ C11 599 | R. Barate <i>et al.</i> | (ALEPH Collab.) |
| BARBERIS 98E | PL B436 204 | D. Barberis <i>et al.</i> | (Omega Expt.) |
| BIRD 89 | SLAC-332 | P.F. Bird | (SLAC) |
| ASTON 88 | NP B296 493 | D. Aston <i>et al.</i> | (SLAC, NAGO, CINC, INUS) |

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|--------------|-----|---------------------|--|----------------------------|
| ATKINSON | 86 | ZPHY C30 521 | M. Atkinson <i>et al.</i> | (BONN, CERN, GLAS+) |
| CARLSMITH | 86 | PRL 56 18 | D. Carlsmith <i>et al.</i> | (EFI, SACL) |
| BAUBILLIER | 84B | ZPHY C26 37 | M. Baubillier <i>et al.</i> | (BIRM, CERN, GLAS+) |
| NAPIER | 84 | PL 149B 514 | A. Napier <i>et al.</i> | (TUFTS, ARIZ, FNAL, FLOR+) |
| BARTH | 83 | NP B223 296 | M. Barth <i>et al.</i> | (BRUX, CERN, GENO, MONS+) |
| BERG | 83 | Thesis UMI 83-21652 | D.M. Berg | (ROCH) |
| CHANDLEE | 83 | PRL 51 168 | C. Chandlee <i>et al.</i> | (ROCH, FNAL, MINN) |
| CLELAND | 82 | NP B208 189 | W.E. Cleland <i>et al.</i> | (DURH, GEVA, LAUS+) |
| DELFOSSE | 81 | NP B183 349 | A. Delfosse <i>et al.</i> | (GEVA, LAUS) |
| TOAFF | 81 | PR D23 1500 | S. Toaff <i>et al.</i> | (ANL, KANS) |
| AJINENKO | 80 | ZPHY C5 177 | I.V. Ajinenko <i>et al.</i> | (SERP, BRUX, MONS+) |
| EVANGELIS... | 80 | NP B165 383 | C. Evangelista <i>et al.</i> | (BARI, BONN, CERN+) |
| AGUILAR-... | 78B | NP B141 101 | M. Aguilar-Benitez <i>et al.</i> | (MADR, TATA+) |
| BALAND | 78 | NP B140 220 | J.F. Baland <i>et al.</i> | (MONS, BELG, CERN+) |
| COOPER | 78 | NP B136 365 | A.M. Cooper <i>et al.</i> | (TATA, CERN, CDEF+) |
| JONGEJANS | 78 | NP B139 383 | B. Jongejans <i>et al.</i> | (ZEEM, CERN, NIJM+) |
| WICKLUND | 78 | PR D17 1197 | A.B. Wicklund <i>et al.</i> | (ANL) |
| BOWLER | 77 | NP B126 31 | M.G. Bowler <i>et al.</i> | (OXF) |
| CARITHERS | 75B | PRL 35 349 | W.C.J. Carithers <i>et al.</i> | (ROCH, MCGI) |
| MCCUBBIN | 75 | NP B86 13 | N.A. McCubbin, L. Lyons | (OXF) |
| PALER | 75 | NP B96 1 | K. Paler <i>et al.</i> | (RHEL, SACL, EPOL) |
| FOX | 74 | NP B80 403 | G.C. Fox, M.L. Griss | (CIT) |
| MATISON | 74 | PR D9 1872 | M.J. Matison <i>et al.</i> | (LBL) |
| BEMPORAD | 73 | NP B51 1 | C. Bemporad <i>et al.</i> | (CERN, ETH, LOIC) |
| CLARK | 73 | NP B54 432 | A.G. Clark, L. Lyons, D. Radojicic | (OXF) |
| LEWIS | 73 | NP B60 283 | P.H. Lewis <i>et al.</i> | (LOWC, LOIC, CDEF) |
| LINGLIN | 73 | NP B55 408 | D. Linglin | (CERN) |
| BUCHNER | 72 | NP B45 333 | K. Buchner <i>et al.</i> | (MPIIM, CERN, BRUX) |
| AGUILAR-... | 71B | PR D4 2583 | M. Aguilar-Benitez, R.L. Eisner, J.B. Kinson | (BNL) |
| HABER | 70 | NP B17 289 | B. Haber <i>et al.</i> | (REHO, SACL, BGNA, EPOL) |
| CRENNELL | 69D | PRL 22 487 | D.J. Crennell <i>et al.</i> | (BNL) |
| DAVIS | 69 | PRL 23 1071 | P.J. Davis <i>et al.</i> | (LRL) |
| SCHWEING... | 68 | PR 166 1317 | F. Schweingruber <i>et al.</i> | (ANL, NWES) |
| BARASH | 67B | PR 156 1399 | N. Barash <i>et al.</i> | (COLU) |
| BARLOW | 67 | NC 50A 701 | J. Barlow <i>et al.</i> | (CERN, CDEF, IRAD, LIVP) |
| DAUBER | 67B | PR 153 1403 | P.M. Dauber <i>et al.</i> | (UCLA) |
| DEBAERE | 67B | NC 51A 401 | W. de Baere <i>et al.</i> | (BRUX, CERN) |
| WOJCICKI | 64 | PR 135 B484 | S.G. Wojcicki | (LRL) |
