$K^*(892)$

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

$K^*(892)$ T-Matrix Pole $\sqrt{s}$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
(890 ± 14) − *i* (26 ± 6) OUR ESTIMATE				
$(890 \pm 2) - i\,(25.6 \pm 1.2)$	[1] PELAEZ	20	RVUE	$\pi K \to \pi K$
$(892 \pm 1) - i\,(29 \pm 1)$	[2] PELAEZ	17	RVUE	$\pi K \to \pi K$
$(889 \pm 13) - i\,(24 \pm 4)$	[3] PELAEZ	04A	RVUE	$\pi K \to \pi K$

[1] Extracted employing πK partial wave analysis from ESTABROOKS 78 and ASTON 88, Roy-Steiner equations and once subtracted forward dispersion relations.
[2] Reanalysis of ESTABROOKS 78 and ASTON 88 satisfying Forward Dispersion Relations and using sequences of Pade approximants.
[3] Reanalysis of data from ESTABROOKS 78 and ASTON 88 in the unitarized ChPT model.

$K^*(892)$ MASS

CHARGED ONLY, HADROPRODUCED

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
891.88±0.23 OUR AVERAGE						
892.7 ±0.5 ±0.1	6796	ABLIKIM	25BO	BES3		$D^0 \to \overline{K}^0 \pi^+ \mu^- \nu_\mu$
892.2 ±0.5 ±1.7		ALBRECHT	20	CBAR		$0.9\ \overline{p}p \to K^+ K^- \pi^0$
892.6 ±0.5	5840	BAUBILLIER	84B	HBC	−	$8.25\ K^- p \to \overline{K}^0 \pi^- p$
888 ±3		NAPIER	84	SPEC	+	$200\ \pi^- p \to 2K^0_S X$
891 ±1		NAPIER	84	SPEC	−	$200\ \pi^- p \to 2K^0_S X$
891.7 ±2.1	3700	BARTH	83	HBC	+	$70\ K^+ p \to K^0 \pi^+ X$
891 ±1	4100	TOAFF	81	HBC	−	$6.5\ K^- p \to \overline{K}^0 \pi^- p$
892.8 ±1.6		AJINENKO	80	HBC	+	$32\ K^+ p \to K^0 \pi^+ X$
890.7 ±0.9	1800	AGUILAR-...	78B	HBC	±	$0.76\ \overline{p}p \to K^\mp K^0_S \pi^\pm$
886.6 ±2.4	1225	BALAND	78	HBC	±	$12\ \overline{p}p \to (K\pi)^\pm X$
891.7 ±0.6	6706	COOPER	78	HBC	±	$0.76\ \overline{p}p \to (K\pi)^\pm X$
891.9 ±0.7	9000	[1] PALER	75	HBC	−	$14.3\ K^- p \to (K\pi)^- X$
892.2 ±1.5	4404	AGUILAR-...	71B	HBC	−	$3.9,4.6\ K^- p \to (K\pi)^- p$
891 ±2	1000	CRENNELL	69D	DBC	−	$3.9\ K^- N \to K^0 \pi^- X$
890 ±3.0	720	BARLOW	67	HBC	±	$1.2\ \overline{p}p \to (K^0\pi)^\pm K^\mp$
889 ±3.0	600	BARLOW	67	HBC	±	$1.2\ \overline{p}p \to (K^0\pi)^\pm K\pi$
891 ±2.3	620	[2] DEBAERE	67B	HBC	+	$3.5\ K^+ p \to K^0 \pi^+ p$
891.0 ±1.2	1700	[3] WOJCICKI	64	HBC	−	$1.7\ K^- p \to \overline{K}^0 \pi^- p$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
893.6 ±0.1 $^{+0.2}_{-0.3}$	183k	ABLIKIM	19AQ	BES	±	$J/\psi \to K^+ K^- \pi^0$
895.6 ±0.8	4k	[4] LEES	17C	BABR		$J/\psi \to K^0_S K^\pm \pi^\mp$
893.2 ±0.1 ±1.0	190k	[5] AAIJ	16N	LHCB		$D^0 \to K^0_S K^\pm \pi^\mp$
893.5 ±1.1	27k	[6] ABELE	99D	CBAR	±	$0.0\ \overline{p}p \to K^+ K^- \pi^0$
890.4 ±0.2 ±0.5	80k	[7] BIRD	89	LASS	−	$11\ K^- p \to \overline{K}^0 \pi^- p$

890.0 $\pm$2.3	800	[2,3] CLELAND 82	SPEC	+	30 $K^+ p \to K^0_S \pi^+ p$
896.0 $\pm$1.1	3200	[2,3] CLELAND 82	SPEC	+	50 $K^+ p \to K^0_S \pi^+ p$
893 $\pm$1	3600	[2,3] CLELAND 82	SPEC	−	50 $K^+ p \to K^0_S \pi^- p$
896.0 $\pm$1.9	380	DELFOSSE 81	SPEC	+	50 $K^\pm p \to K^\pm \pi^0 p$
886.0 $\pm$2.3	187	DELFOSSE 81	SPEC	−	50 $K^\pm p \to K^\pm \pi^0 p$
894.2 $\pm$2.0	765	[2] CLARK 73	HBC	−	3.13 $K^- p \to \overline{K}^0 \pi^- p$
894.3 $\pm$1.5	1150	[2,3] CLARK 73	HBC	−	3.3 $K^- p \to \overline{K}^0 \pi^- p$
892.0 $\pm$2.6	341	[2] SCHWEING...68	HBC	−	5.5 $K^- p \to \overline{K}^0 \pi^- p$

[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] From a Dalitz plot analysis in an isobar model with charged and neutral $K^*(892)$ masses and widths floating.
[5] Average of fit results with different parametrizations for the $K\pi$ S-wave.
[6] K-matrix pole.
[7] From a partial wave amplitude analysis.

CHARGED ONLY, PRODUCED IN τ LEPTON DECAYS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*	*TECN*	*COMMENT*
895.47$\pm$0.20$\pm$0.74	53k	[1] EPIFANOV 07	BELL	$\tau^- \to K^0_S \pi^- \nu_\tau$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
892.0 $\pm$0.5		[2] BOITO 10	RVUE	$\tau^- \to K^0_S \pi^- \nu_\tau$
892.0 $\pm$0.9		[3,4] BOITO 09	RVUE	$\tau^- \to K^0_S \pi^- \nu_\tau$
895.3 $\pm$0.2		[4,5] JAMIN 08	RVUE	$\tau^- \to K^0_S \pi^- \nu_\tau$
896.4 $\pm$0.9	12k	[6] BONVICINI 02	CLEO	$\tau^- \to K^- \pi^0 \nu_\tau$
895 $\pm$2		[7] BARATE 99R	ALEP	$\tau^- \to K^- \pi^0 \nu_\tau$

[1] From a fit in the $K^*_0(700)$ + $K^*(892)$ + $K^*(1410)$ model.
[2] From the pole position of the $K\pi$ vector form factor using EPIFANOV 07 and constraints from K_{l3} decays in ANTONELLI 10.
[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.
[5] Reanalysis of EPIFANOV 07 using resonance chiral theory.
[6] 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.
[7] With mass and width of the $K^*(1410)$ fixed at 1412 MeV and 227 MeV, respectively.

NEUTRAL ONLY

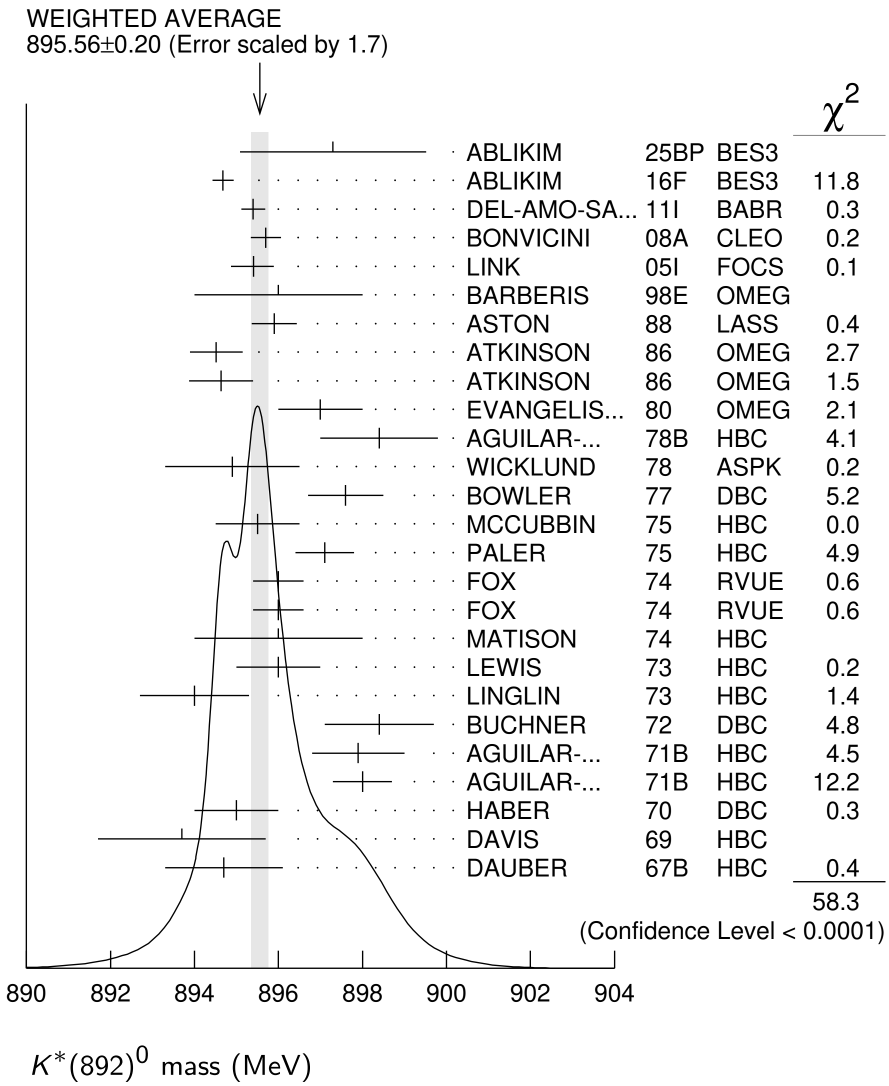
VALUE (MeV)	*EVTS*	*DOCUMENT ID*	*TECN*	*COMMENT*
895.56$\pm$0.20 OUR AVERAGE		Error includes scale factor of 1.7. See the ideogram below.		
897.3 $\pm$0.3 $\pm$2.2	12k	ABLIKIM 25BP	BES3	$D^+ \to K^0_S \pi^0 \ell^+ \nu_\ell$
894.68$\pm$0.25$\pm$0.05		[1] ABLIKIM 16F	BES3	$D^+ \to K^- \pi^+ e^+ \nu_e$
895.4 $\pm$0.2 $\pm$0.2	243k	[2] DEL-AMO-SA...11I	BABR	$D^+ \to K^- \pi^+ e^+ \nu_e$
895.7 $\pm$0.2 $\pm$0.3	141k	[3] BONVICINI 08A	CLEO	$D^+ \to K^- \pi^+ \pi^+$
895.41$\pm$0.32$^{+0.35}_{-0.43}$	18k	[4] LINK 05I	FOCS	$D^+ \to K^- \pi^+ \mu^+ \nu_\mu$
896 $\pm$2		BARBERIS 98E	OMEG	450 $p p \to p_f p_s K^* \overline{K}^*$
895.9 $\pm$0.5 $\pm$0.2		ASTON 88	LASS	11 $K^- p \to K^- \pi^+ n$
894.52$\pm$0.63	25k	[5] ATKINSON 86	OMEG	20–70 γp
894.63$\pm$0.76	20k	[5] ATKINSON 86	OMEG	20–70 γp

897	±1	28k	EVANGELIS...	80	OMEG	10 $\pi^- p \to K^+ \pi^- (\Lambda, \Sigma)$
898.4	±1.4	1180	AGUILAR-...	78B	HBC	0.76 $\overline{p} p \to K^\mp K^0_S \pi^\pm$
894.9	±1.6		WICKLUND	78	ASPK	3,4,6 $K^\pm N \to (K\pi)^0 N$
897.6	±0.9		BOWLER	77	DBC	5.4 $K^+ d \to K^+ \pi^- p p$
895.5	±1.0	3600	MCCUBBIN	75	HBC	3.6 $K^- p \to K^- \pi^+ n$
897.1	±0.7	22k	[5] PALER	75	HBC	14.3 $K^- p \to (K\pi)^0$ X
896.0	±0.6	10k	FOX	74	RVUE	2 $K^- p \to K^- \pi^+ n$
896.0	±0.6		FOX	74	RVUE	2 $K^+ n \to K^+ \pi^- p$
896	±2		[6] MATISON	74	HBC	12 $K^+ p \to K^+ \pi^- \Delta$
896	±1	3186	LEWIS	73	HBC	2.1–2.7 $K^+ p \to K \pi \pi p$
894.0	±1.3		[6] LINGLIN	73	HBC	2–13 $K^+ p \to K^+ \pi^- \pi^+ p$
898.4	±1.3	1700	[7] BUCHNER	72	DBC	4.6 $K^+ n \to K^+ \pi^- p$
897.9	±1.1	2934	[7] AGUILAR-...	71B	HBC	3.9,4.6 $K^- p \to K^- \pi^+ n$
898.0	±0.7	5362	[7] AGUILAR-...	71B	HBC	3.9,4.6 $K^- p \to K^- \pi^+ \pi^- p$
895	±1	4300	[8] HABER	70	DBC	3 $K^- N \to K^- \pi^+$ X
893.7	±2.0	10k	DAVIS	69	HBC	12 $K^+ p \to K^+ \pi^- \pi^+ p$
894.7	±1.4	1040	[7] DAUBER	67B	HBC	2.0 $K^- p \to K^- \pi^+ \pi^- p$

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

895.50	±0.92±2.6		[9] ADUSZKIEW...	20A	NA61	158 $p p$
898.1	±1.0	4k	[10] LEES	17C	BABR	$J/\psi \to K^0_S K^\pm \pi^\mp$
895.53	±0.17		LEES	13F	BABR	$D^+ \to K^+ K^- \pi^+$
894.9	±0.5 ±0.7	14.4k	[11] MITCHELL	09A	CLEO	$D^+_s \to K^+ K^- \pi^+$
896.2	±0.3	20k	[12] AUBERT	07AK	BABR	10.6 $e^+ e^- \to K^{*0} K^\pm \pi^\mp \gamma$
900.7	±1.1	5900	BARTH	83	HBC	70 $K^+ p \to K^+ \pi^-$ X

[1] Taking also into account the $K^*_0(1430)^0$ and $K^*_2(1430)^0$.
[2] Taking into account the $K^*(892)^0$, S-wave and P-wave ($K^*(1410)^0$).
[3] From the isobar model with a complex pole for the κ.
[4] Fit to $K\pi$ mass spectrum includes a non-resonant scalar component.
[5] Inclusive reaction. Complicated background and phase-space effects.
[6] From pole extrapolation.
[7] Mass errors enlarged by us to $\Gamma/\sqrt{N}$. See note.
[8] Number of events in peak reevaluated by us.
[9] For transverse momenta between 0.6 and 0.8 GeV/c and rapidity $0 < y < 0.5$.
[10] From a Dalitz plot analysis in an isobar model with charged and neutral $K^*(892)$ masses and widths floating.
[11] This value comes from a fit with χ^2 of 178/117.
[12] Systematic uncertainties not estimated.



$K^*(892)$ MASSES AND MASS DIFFERENCES

Unrealistically small errors have been reported by some experiments. We use simple "realistic" tests for the minimum errors on the determination of a mass and width from a sample of N events:

$$\delta_{\min}(m) = \frac{\Gamma}{\sqrt{N}}, \quad \delta_{\min}(\Gamma) = 4\frac{\Gamma}{\sqrt{N}} \ . \tag{1}$$

We consistently increase unrealistic errors before averaging. For a detailed discussion, see the 1971 edition of this Note.

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

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 $\overline{p}p \to K^\mp K^0_S \pi^\pm$
5.7±1.7	7338	AGUILAR-...	71B	HBC	−0	3.9,4.6 $K^- p$
6.3±4.1	283	[1] BARASH	67B	HBC		0.0 $\overline{p}p$

[1] 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
2.1 ±0.5 ±0.5	243k	[1] DEL-AMO-SA...	11I	BABR	0	$D^+ \to K^- \pi^+ e^+ \nu_e$
$3.96 \pm 0.54^{+1.31}_{-0.90}$	18k	[2] LINK	05I	FOCS	0	$D^+ \to K^- \pi^+ \mu^+ \nu_\mu$
3.4 ±0.7		ASTON	88	LASS	0	11 $K^- p \to K^- \pi^+ n$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
12.1 ±3.2 ±3.0		BIRD	89	LASS	−	11 $K^- p \to \overline{K}^0 \pi^- p$

[1] Taking into account the $K^*(892)^0$, S-wave and P-wave ($K^*(1410)^0$).

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

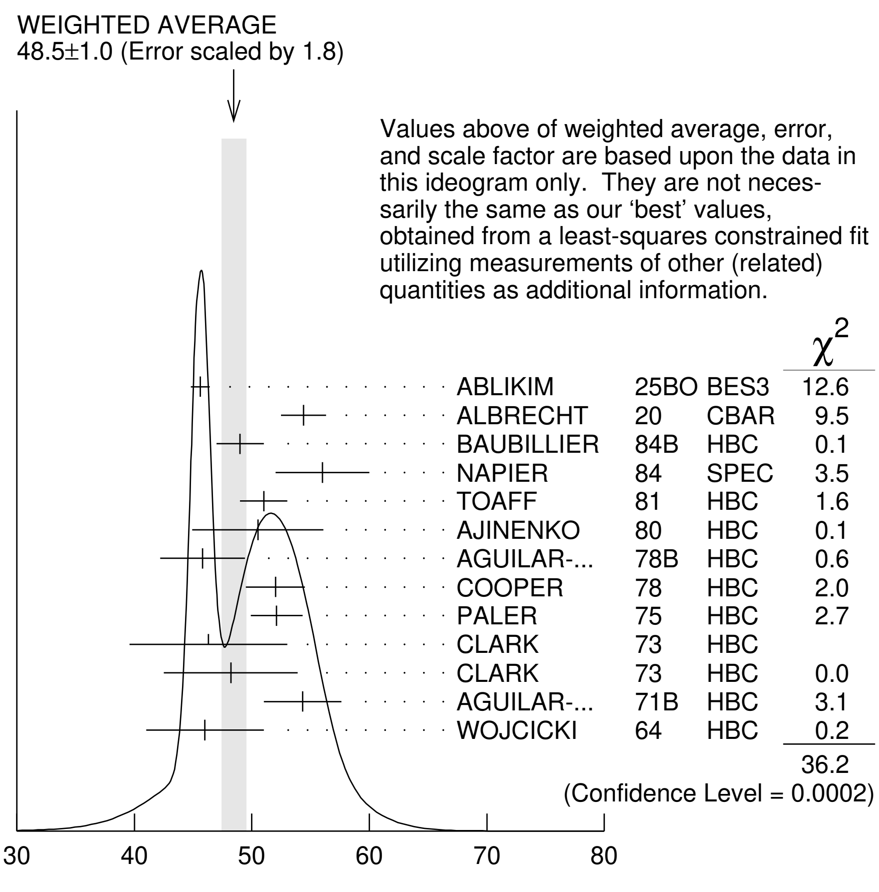
$K^*(892)$ WIDTH

CHARGED ONLY, HADROPRODUCED

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
48.5±1.2 OUR FIT Error includes scale factor of 2.1.						
48.5±1.0 OUR AVERAGE Error includes scale factor of 1.8. See the ideogram below.						
45.6±0.8±0.1	6796	ABLIKIM	25BO	BES3		$D^0 \to \overline{K}^0 \pi^+ \mu^- \nu_\mu$
54.4±0.9±1.7		ALBRECHT	20	CBAR		0.9 $\overline{p}p \to K^+ K^- \pi^0$
49 ±2	5840	BAUBILLIER	84B	HBC	−	8.25 $K^- p \to \overline{K}^0 \pi^- p$
56 ±4		NAPIER	84	SPEC	−	200 $\pi^- p \to 2K^0_S X$
51 ±2	4100	TOAFF	81	HBC	−	6.5 $K^- p \to \overline{K}^0 \pi^- p$
50.5±5.6		AJINENKO	80	HBC	+	32 $K^+ p \to K^0 \pi^+ X$
45.8±3.6	1800	AGUILAR-...	78B	HBC	±	0.76 $\overline{p}p \to K^\mp K^0_S \pi^\pm$
52.0±2.5	6706	[1] COOPER	78	HBC	±	0.76 $\overline{p}p \to (K\pi)^\pm X$
52.1±2.2	9000	[2] PALER	75	HBC	−	14.3 $K^- p \to (K\pi)^- X$
46.3±6.7	765	[1] CLARK	73	HBC	−	3.13 $K^- p \to \overline{K}^0 \pi^- p$
48.2±5.7	1150	[1,3] CLARK	73	HBC	−	3.3 $K^- p \to \overline{K}^0 \pi^- p$
54.3±3.3	4404	[1] AGUILAR-...	71B	HBC	−	3.9,4.6 $K^- p \to (K\pi)^- p$
46 ±5	1700	[1,3] WOJCICKI	64	HBC	−	1.7 $K^- p \to \overline{K}^0 \pi^- p$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
$46.7 \pm 0.2^{+0.1}_{-0.2}$	183k	ABLIKIM	19AQ	BES	±	$J/\psi \to K^+ K^- \pi^0$
43.6±1.3	4k	[4] LEES	17C	BABR		$J/\psi \to K^0_S K^\pm \pi^\mp$
47.2±0.3±2.3	190k	[5] AAIJ	16N	LHCB		$D^0 \to K^0_S K^\pm \pi^\mp$

54.8±1.7	27k	[6] ABELE	99D	CBAR	±	0.0 $\overline{p}p \to K^+ K^- \pi^0$
45.2±1 ±2	80k	[7] BIRD	89	LASS	−	11 $K^- p \to \overline{K}^0 \pi^- p$
42.8±7.1	3700	BARTH	83	HBC	+	70 $K^+ p \to K^0 \pi^+ X$
64.0±9.2	800	[1,3] CLELAND	82	SPEC	+	30 $K^+ p \to K^0_S \pi^+ p$
62.0±4.4	3200	[1,3] CLELAND	82	SPEC	+	50 $K^+ p \to K^0_S \pi^+ p$
55 ±4	3600	[1,3] CLELAND	82	SPEC	−	50 $K^+ p \to K^0_S \pi^- p$
62.6±3.8	380	DELFOSSE	81	SPEC	+	50 $K^\pm p \to K^\pm \pi^0 p$
50.5±3.9	187	DELFOSSE	81	SPEC	−	50 $K^\pm p \to K^\pm \pi^0 p$

[1] Width errors enlarged by us to $4 \times \Gamma/\sqrt{N}$; see note.
[2] Inclusive reaction. Complicated background and phase-space effects.
[3] Number of events in peak reevaluated by us.
[4] From a Dalitz plot analysis in an isobar model with charged and neutral $K^*(892)$ masses and widths floating.
[5] Average of fit results with different parametrizations for the $K\pi$ S-wave.
[6] K-matrix pole.
[7] From a partial wave amplitude analysis.



$K^*(892)^\pm$ width (MeV)

CHARGED ONLY, PRODUCED IN τ LEPTON DECAYS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
46.2±0.6±1.2	53k	[1] EPIFANOV	07	BELL	$\tau^- \to K^0_S \pi^- \nu_\tau$

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

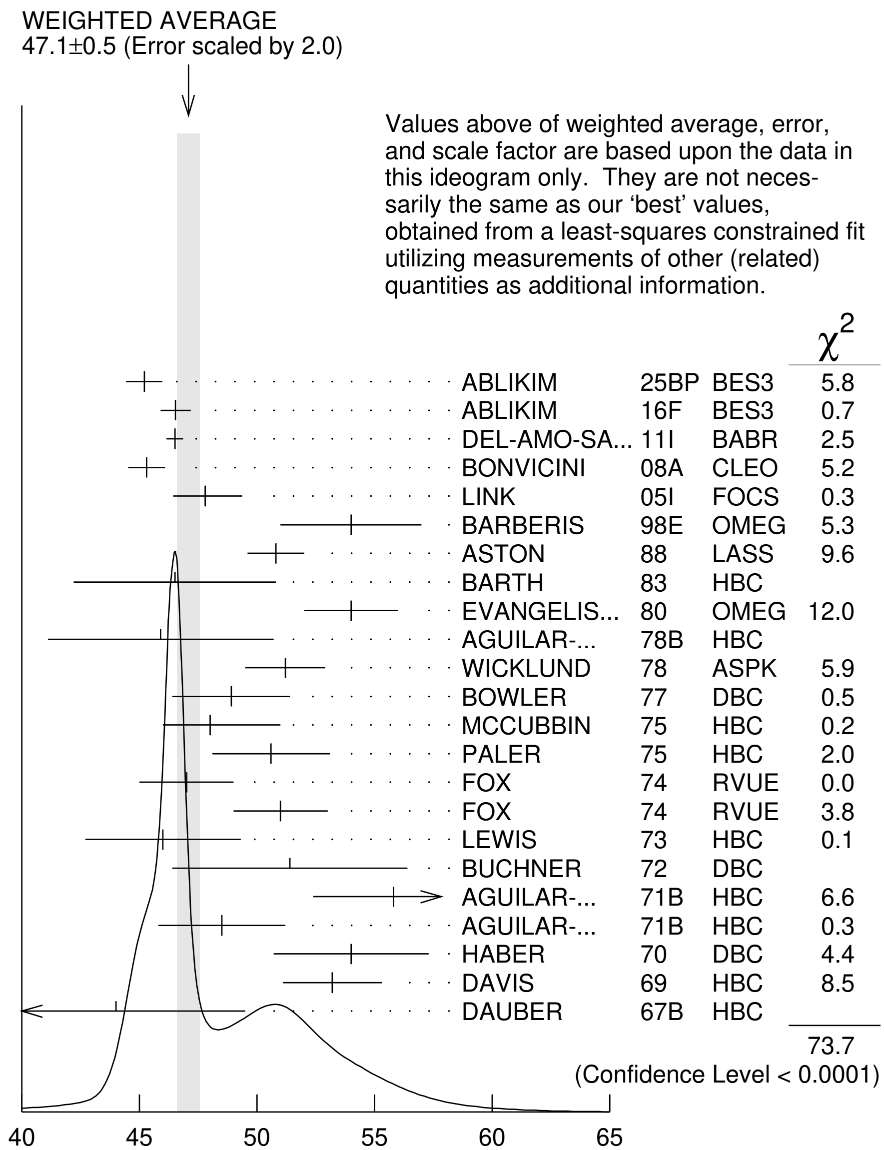
46.5±1.1	[2] BOITO	10	RVUE	$\tau^- \to K^0_S \pi^- \nu_\tau$
46.2±0.4	[3,4] BOITO	09	RVUE	$\tau^- \to K^0_S \pi^- \nu_\tau$
47.5±0.4	[4,5] JAMIN	08	RVUE	$\tau^- \to K^0_S \pi^- \nu_\tau$
55 ±8	[6] BARATE	99R	ALEP	$\tau^- \to K^- \pi^0 \nu_\tau$

[1] From a fit in the $K^*_0(700) + K^*(892) + K^*(1410)$ model.
[2] From the pole position of the $K\pi$ vector form factor using EPIFANOV 07 and constraints from K_{l3} decays in ANTONELLI 10.
[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.
[5] Reanalysis of EPIFANOV 07 using resonance chiral theory.
[6] With mass and width of the $K^*(1410)$ fixed at 1412 MeV and 227 MeV, respectively.

NEUTRAL ONLY

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
47.1 ±0.5 OUR FIT Error includes scale factor of 2.0.					
47.1 ±0.5 OUR AVERAGE Error includes scale factor of 2.0. See the ideogram below.					
45.2 ±0.6 ±0.5	12k	ABLIKIM	25BP	BES3	$D^+ \to K^0_S \pi^0 \ell^+ \nu_\ell$
46.53±0.56±0.31		[1] ABLIKIM	16F	BES3	$D^+ \to K^- \pi^+ e^+ \nu_e$
46.5 ±0.3 ±0.2	243k	[2] DEL-AMO-SA...	11I	BABR	$D^+ \to K^- \pi^+ e^+ \nu_e$
45.3 ±0.5 ±0.6	141k	[3] BONVICINI	08A	CLEO	$D^+ \to K^- \pi^+ \pi^+$
47.79±0.86$^{+1.32}_{-1.06}$	18k	[4] LINK	05I	FOCS	$D^+ \to K^- \pi^+ \mu^+ \nu_\mu$
54 ±3		BARBERIS	98E	OMEG	450 $p p \to p_f p_s K^* \overline{K}^*$
50.8 ±0.8 ±0.9		ASTON	88	LASS	11 $K^- p \to K^- \pi^+ n$
46.5 ±4.3	5900	BARTH	83	HBC	70 $K^+ p \to K^+ \pi^- X$
54 ±2	28k	EVANGELIS...	80	OMEG	10 $\pi^- p \to K^+ \pi^- (\Lambda, \Sigma)$
45.9 ±4.8	1180	AGUILAR-...	78B	HBC	0.76 $\overline{p} p \to K^\mp K^0_S \pi^\pm$
51.2 ±1.7		WICKLUND	78	ASPK	3,4,6 $K^\pm N \to (K\pi)^0 N$
48.9 ±2.5		BOWLER	77	DBC	5.4 $K^+ d \to K^+ \pi^- p p$
48 $^{+3}_{-2}$	3600	MCCUBBIN	75	HBC	3.6 $K^- p \to K^- \pi^+ n$
50.6 ±2.5	22k	[5] PALER	75	HBC	14.3 $K^- p \to (K\pi)^0 X$
47 ±2	10k	FOX	74	RVUE	2 $K^- p \to K^- \pi^+ n$
51 ±2		FOX	74	RVUE	2 $K^+ n \to K^+ \pi^- p$
46.0 ±3.3	3186	[6] LEWIS	73	HBC	2.1–2.7 $K^+ p \to K \pi \pi p$
51.4 ±5.0	1700	[6] BUCHNER	72	DBC	4.6 $K^+ n \to K^+ \pi^- p$
55.8 $^{+4.2}_{-3.4}$	2934	[6] AGUILAR-...	71B	HBC	3.9,4.6 $K^- p \to K^- \pi^+ n$
48.5 ±2.7	5362	AGUILAR-...	71B	HBC	3.9,4.6 $K^- p \to K^- \pi^+ \pi^- p$
54.0 ±3.3	4300	[6,7] HABER	70	DBC	3 $K^- N \to K^- \pi^+ X$
53.2 ±2.1	10k	[6] DAVIS	69	HBC	12 $K^+ p \to K^+ \pi^- \pi^+ p$
44 ±5.5	1040	[6] DAUBER	67B	HBC	2.0 $K^- p \to K^- \pi^+ \pi^- p$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
48.8 ±1.8 ±2.0		[8] ADUSZKIEW...	20A	NA61	158 $p p$
52.6 ±1.7	4k	[9] LEES	17C	BABR	$J/\psi \to K^0_S K^\pm \pi^\mp$
44.90±0.30		LEES	13F	BABR	$D^+ \to K^+ K^- \pi^+$

45.7 ±1.1 ±0.5	14.4k	[10] MITCHELL	09A	CLEO	$D_s^+ \rightarrow K^+ K^- \pi^+$
50.6 ±0.9	20k	[11] AUBERT	07AK	BABR	$10.6\ e^+ e^- \rightarrow K^{*0} K^\pm \pi^\mp \gamma$



NEUTRAL ONLY (MeV)

[1] Taking also into account the $K_0^*(1430)^0$ and $K_2^*(1430)^0$.
[2] Taking into account the $K^*(892)^0$, S-wave and P-wave ($K^*(1410)^0$).
[3] From the isobar model with a complex pole for the κ.
[4] Fit to $K\pi$ mass spectrum includes a non-resonant scalar component.
[5] Inclusive reaction. Complicated background and phase-space effects.
[6] Width errors enlarged by us to $4 \times \Gamma/\sqrt{N}$; see note.
[7] Number of events in peak reevaluated by us.
[8] For transverse momenta between 0.6 and 0.8 GeV/c and rapidity $0 < y < 0.5$.

[9] From a Dalitz plot analysis in an isobar model with charged and neutral $K^*(892)$ masses and widths floating.
[10] This value comes from a fit with χ^2 of 178/117.
[11] Systematic uncertainties not estimated.

$K^*(892)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)	Confidence level
Γ_1	$K\pi$	$\sim$ 100 %	
Γ_2	$(K\pi)^{\pm}$	(99.896 $\pm$ 0.010) %	
Γ_3	$(K\pi)^{0}$	(99.753 $\pm$ 0.021) %	
Γ_4	$K^0\gamma$	(2.47 $\pm$ 0.21) $\times 10^{-3}$	
Γ_5	$K^{\pm}\gamma$	(1.04 $\pm$ 0.10) $\times 10^{-3}$	
Γ_6	$K\pi\pi$	$<$ 7 $\times 10^{-4}$	95%

CONSTRAINED FIT INFORMATION

An overall fit to the total width and a partial width uses 15 measurements and one constraint to determine 3 parameters. The overall fit has a $\chi^2 = 36.3$ for 13 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.

x_5	−100	
Γ	26	−26
	x_2	x_5

	Mode	Rate (MeV)	Scale factor
Γ_2	$(K\pi)^{\pm}$	48.4 $\pm$ 1.2	2.1
Γ_5	$K^{\pm}\gamma$	0.050 $\pm$ 0.005	

CONSTRAINED FIT INFORMATION

An overall fit to the total width and a partial width uses 24 measurements and one constraint to determine 3 parameters. The overall fit has a $\chi^2 = 74.8$ for 22 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.

x_4	−100	
Γ	12	−12
	x_3	x_4

	Mode	Rate (MeV)	Scale factor
Γ_3	$(K\pi)^0$	47.0 ±0.5	2.0
Γ_4	$K^0\gamma$	0.117±0.010	

$K^*(892)$ PARTIAL WIDTHS

$\Gamma(K^0\gamma)$ — Γ_4

VALUE (keV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
116 ±10 OUR FIT						
116.5± 9.9	584	CARLSMITH	86	SPEC	0	$K^0_L A \to K^0_S \pi^0 A$

$\Gamma(K^\pm\gamma)$ — Γ_5

VALUE (keV)	DOCUMENT ID		TECN	CHG	COMMENT
50± 5 OUR FIT					
50± 5 OUR AVERAGE					
48±11	BERG	83	SPEC	−	156 $K^- A \to \overline{K}\pi A$
51± 5	CHANDLEE	83	SPEC	+	200 $K^+ A \to K\pi A$

$K^*(892)$ BRANCHING RATIOS

$\Gamma(K^0\gamma)/\Gamma_{total}$ — Γ_4/Γ

VALUE (units 10^{-3})	DOCUMENT ID		TECN	CHG	COMMENT
2.47±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 $\overline{K}^0 A$

$\Gamma(K^\pm\gamma)/\Gamma_{total}$ — Γ_5/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN	CHG	COMMENT
1.04±0.10 OUR FIT						
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<1.6	95	BEMPORAD	73	CNTR	+	10–16 $K^+ A$

$\Gamma(K\pi\pi)/\Gamma((K\pi)^\pm)$ — Γ_6/Γ_2

VALUE	CL%	DOCUMENT ID		TECN	CHG	COMMENT
$< 7 \times 10^{-4}$	95	JONGEJANS	78	HBC		4 $K^- p \to p\overline{K}^0 2\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
$<20 \times 10^{-4}$		WOJCICKI	64	HBC	−	1.7 $K^- p \to \overline{K}^0 \pi^- p$

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