$K_0^*(800)$ or κ

$I(J^P) = \frac{1}{2}(0^+)$

OMITTED FROM SUMMARY TABLE

Needs confirmation.

$K_0^*(800)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$841 \pm 30^{+81}_{-73}$	25k	[1] ABLIKIM	06C	BES2	$J/\psi \to \overline{K}^*(892)^0 K^+ \pi^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
750^{+30}_{-55}		[2] BUGG	06	RVUE	
753 ± 52		[3] PELAEZ	04A	RVUE	$K\pi \to K\pi$
594 ± 79		[4] ZHENG	04	RVUE	$K^- p \to K^- \pi^+ n$
722 ± 60		[5] BUGG	03	RVUE	11 $K^- p \to K^- \pi^+ n$
$797 \pm 19 \pm 43$	15090	[6] AITALA	02	E791	$D^+ \to K^- \pi^+ \pi^+$
905^{+65}_{-30}		[7] ISHIDA	97B	RVUE	11 $K^- p \to K^- \pi^+ n$

[1] S-matrix pole.

[2] S-matrix pole. Reanalysis of ASTON 88, AITALA 02, and ABLIKIM 06C using for the κ an s-dependent width with an Adler zero near threshold.

[3] T-matrix pole. Reanalysis of data from LINGLIN 73, ESTABROOKS 78, and ASTON 88 in the unitarized ChPT model.

[4] Using ASTON 88.

[5] T-matrix pole. Reanalysis of ASTON 88 data.

[6] Not seen by KOPP 01 using 7070 events of $D^0 \to K^- \pi^+ \pi^0$. LINK 02E and LINK 05I show clear evidence for a constant non-resonant scalar amplitude rather than $K_0^*(800)$ in their high statistics analysis of $D^+ \to K^- \pi^+ \mu^+ \nu_\mu$.

[7] Reanalysis of ASTON 88 using interfering Breit-Wigner amplitudes.

$K_0^*(800)$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$618 \pm 90^{+96}_{-144}$	25k	[8] ABLIKIM	06C	BES2	$J/\psi \to \overline{K}^*(892)^0 K^+ \pi^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
684 ± 120		[9] BUGG	06	RVUE	
470 ± 66		[10] PELAEZ	04A	RVUE	$K\pi \to K\pi$
724 ± 332		[11] ZHENG	04	RVUE	$K^- p \to K^- \pi^+ n$
772 ± 100		[12] BUGG	03	RVUE	11 $K^- p \to K^- \pi^+ n$
$410 \pm 43 \pm 87$	15090	[13] AITALA	02	E791	$D^+ \to K^- \pi^+ \pi^+$
545^{+235}_{-110}		[14] ISHIDA	97B	RVUE	11 $K^- p \to K^- \pi^+ n$

[8] S-matrix pole.

[9] S-matrix pole. Reanalysis of ASTON 88, AITALA 02, and ABLIKIM 06C using for the κ an s-dependent width with an Adler zero near threshold.

[10] T-matrix pole. Reanalysis of data from LINGLIN 73, ESTABROOKS 78, and ASTON 88 in the unitarized ChPT model.

[11] Using ASTON 88.

[12] T-matrix pole. Reanalysis of ASTON 88 data.

[13] Not seen by KOPP 01 using 7070 events of $D^0 \to K^-\pi^+\pi^0$. LINK 02E and LINK 05I show clear evidence for a constant non-resonant scalar amplitude rather than $K_0^*(800)$ in their high statistics analysis of $D^+ \to K^-\pi^+\mu^+\nu_\mu$.

[14] Reanalysis of ASTON 88 using interfering Breit-Wigner amplitudes.

$K_0^*(800)$ REFERENCES

ABLIKIM	06C	PL B633 681	M. Ablikim *et al.*	(BES Collab.)
BUGG	06	PL B632 471	D.V. Bugg	(LOQM)
LINK	05I	PL B621 72	J.M. Link *et al.*	(FNAL FOCUS Collab.)
PELAEZ	04A	MPL A19 2879	J.R. Pelaez	
ZHENG	04	NP A733 235	H.Q. Zheng *et al.*	
BUGG	03	PL B572 1	D.V. Bugg	
AITALA	02	PRL 89 121801	E.M. Aitala *et al.*	(FNAL E791 Collab.)
LINK	02E	PL B535 43	J.M. Link *et al.*	(FNAL FOCUS Collab.)
KOPP	01	PR D63 092001	S. Kopp *et al.*	(CLEO Collab.)
ISHIDA	97B	PTP 98 621	S. Ishida *et al.*	
ASTON	88	NP B296 493	D. Aston *et al.*	(SLAC, NAGO, CINC, INUS)
ESTABROOKS	78	NP B133 490	P.G. Estabrooks *et al.*	(MCGI, CARL, DURH+)
LINGLIN	73	NP B55 408	D. Linglin	(CERN)

OTHER RELATED PAPERS

AITALA	06	PR D73 032004	E.M. Aitala *et al.*	(FNAL E791 Collab.)
CHENG	06	PR D73 014017	H.-Y. Cheng, C.-K. Chua, K.-C. Yang	
LINK	06	PL B633 183	J.M. Link *et al.*	(FNAL FOCUS Collab.)
ABLIKIM	05Q	PR D72 092002	M. Ablikim *et al.*	(BES Collab.)
BRITO	05	PL B608 69	T.V. Brito *et al.*	
BUGG	05A	EPJ A25 107	D.V. Bugg	(LOQM)
BUGG	05B	EPJ A26 151	D.V. Bugg	(LOQM)
GARMASH	05	PR D71 092003	A. Garmash *et al.*	(BELLE Collab.)
LI	05B	EPJ A25 263	D.-M. Li, K.-W. Wei, H. Yu	
ABLIKIM	04E	PL B603 138	M. Ablikim *et al.*	(BES Collab.)
PELAEZ	04	PRL 92 102001	J.R. Pelaez	
YNDURAIN	04	PL B578 99	F.J. Yndurain	
SEMENOV	03	PAN 66 526 Translated from YAF 66 553.	S.V. Semenov	
LINK	02L	PL B544 89	J.M. Link *et al.*	(FNAL FOCUS Collab.)
BEVEREN	01B	EPJ C22 493	E. van Beveren	