

**$K_0^*(800)$**   
or  $\kappa$

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

## OMITTED FROM SUMMARY TABLE

The existence of this state is controversial.

### **$K_0^*(800)$ MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>• • • We do not use the following data for averages, fits, limits, etc. • • •</b>				
722 $\pm$ 60		1 BUGG	03 RVUE	$11 K^- p \rightarrow K^- \pi^+ n$
797 $\pm$ 19 $\pm$ 43	15090	2 AITALA	02 E791	$D^+ \rightarrow K^- \pi^+ \pi^+$
905 $^{+65}_{-30}$		3 ISHIDA	97B RVUE	$11 K^- p \rightarrow K^- \pi^+ n$

<sup>1</sup> T-matrix pole. Reanalysis of ASTON 88 data.

<sup>2</sup> Not seen by KOPP 01 using 7070 events of  $D^0 \rightarrow K^- \pi^+ \pi^0$ . Possibly seen by LINK 02E in  $D^+ \rightarrow K^- \pi^+ \mu^+ \nu_\mu$ .

<sup>3</sup> Reanalysis of ASTON 88 using interfering Breit-Wigner amplitudes.

### **$K_0^*(800)$ WIDTH**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>• • • We do not use the following data for averages, fits, limits, etc. • • •</b>				
772 $\pm$ 100		4 BUGG	03 RVUE	$11 K^- p \rightarrow K^- \pi^+ n$
410 $\pm$ 43 $\pm$ 87	15090	5 AITALA	02 E791	$D^+ \rightarrow K^- \pi^+ \pi^+$
545 $^{+235}_{-110}$		6 ISHIDA	97B RVUE	$11 K^- p \rightarrow K^- \pi^+ n$

<sup>4</sup> T-matrix pole. Reanalysis of ASTON 88 data.

<sup>5</sup> Not seen by KOPP 01 using 7070 events of  $D^0 \rightarrow K^- \pi^+ \pi^0$ . Possibly seen by LINK 02E in  $D^+ \rightarrow K^- \pi^+ \mu^+ \nu_\mu$ .

<sup>6</sup> Reanalysis of ASTON 88 using interfering Breit-Wigner amplitudes.

### **$K_0^*(800)$ REFERENCES**

BUGG	03	PL B572 1	D.V. Bugg	
AITALA	02	PRL 89 121801	E.M. Aitala <i>et al.</i>	(FNAL E791 Collab.)
LINK	02E	PL B535 43	J.M. Link <i>et al.</i>	(FNAL FOCUS Collab.)
KOPP	01	PR D63 092001	S. Kopp <i>et al.</i>	(CLEO Collab.)
ISHIDA	97B	PTP 98 621	S. Ishida <i>et al.</i>	
ASTON	88	NP B296 493	D. Aston <i>et al.</i>	(SLAC, NAGO, CINC, INUS)

### **OTHER RELATED PAPERS**

SEMENOV	03	PAN 66 526 Translated from YAF 66 553.	S.V. Semenov
BEVEREN	01B	EPJ C22 493	E. van Beveren