NODE=M134

$K_0^*(1950)$

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

OMITTED FROM SUMMARY TABLE

Seen in partial-wave analysis of the $K^- \pi^+$ system. Needs confirmation.

NODE=M134

$K_0^*(1950)$ MASS

NODE=M134205

NODE=M134M

VALUE (MeV)		*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
1945±10±20	[1]	ASTON	88	LASS	0	11 $K^- p \to K^- \pi^+ n$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
1917±12	[2]	ZHOU	06	RVUE		$K p \to K^- \pi^+ n$
1820±40	[3]	ANISOVICH	97C	RVUE		11 $K^- p \to K^- \pi^+ n$

[1] We take the central value of the two solutions and the larger error given. NODE=M134M;LINKAGE=A

[2] S-matrix pole. Using ASTON 88 and assuming $K_0^*(800)$, $K_0^*(1430)$. NODE=M134M;LINKAGE=ZU

[3] T-matrix pole. Reanalysis of ASTON 88 data. NODE=M134M;LINKAGE=A1

$K_0^*(1950)$ WIDTH

NODE=M134210

NODE=M134W

VALUE (MeV)		*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
201± 34±79	[4]	ASTON	88	LASS	0	11 $K^- p \to K^- \pi^+ n$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
145± 38	[5]	ZHOU	06	RVUE		$K p \to K^- \pi^+ n$
250±100	[6]	ANISOVICH	97C	RVUE		11 $K^- p \to K^- \pi^+ n$

[4] We take the central value of the two solutions and the larger error given. NODE=M134W;LINKAGE=A

[5] S-matrix pole. Using ASTON 88 and assuming $K_0^*(800)$, $K_0^*(1430)$. NODE=M134W;LINKAGE=ZU

[6] T-matrix pole. Reanalysis of ASTON 88 data. NODE=M134W;LINKAGE=A1

$K_0^*(1950)$ DECAY MODES

NODE=M134215;NODE=M134

	Mode	Fraction (Γ_i/Γ)
Γ_1	$K\pi$	(52±14) %

DESIG=1

$K_0^*(1950)$ BRANCHING RATIOS

NODE=M134220

$\Gamma(K\pi)/\Gamma_{total}$ Γ_1/Γ

NODE=M134R1
NODE=M134R1

VALUE		*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
0.52±0.08±0.12	[7]	ASTON	88	LASS	0	11 $K^- p \to K^- \pi^+ n$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
~ 0.60	[8]	ZHOU	06	RVUE		$K p \to K^- \pi^+ n$

[7] We take the central value of the two solutions and the larger error given. NODE=M134R1;LINKAGE=A

[8] S-matrix pole. Using ASTON 88 and assuming $K_0^*(800)$, $K_0^*(1430)$. NODE=M134R1;LINKAGE=ZU

$K_0^*(1950)$ REFERENCES

NODE=M134

ZHOU 06 NP A775 212 Z.Y. Zhou, H.Q. Zheng REFID=51198
ANISOVICH 97C PL B413 137 A.V. Anisovich, A.V. Sarantsev REFID=45815
ASTON 88 NP B296 493 D. Aston *et al.* (SLAC, NAGO, CINC, INUS) REFID=40262

OTHER RELATED PAPERS

ABLIKIM 05Q PR D72 092002 M. Ablikim *et al.* (BES Collab.) REFID=50958
KATAEV 05 PAN 68 567 A.L. Kataev REFID=50797
Translated from YAF 68 597.
JAMIN 00 NP B587 331 M. Jamin *et al.* REFID=47983
SHAKIN 00 PR D62 114014 C.M. Shakin, H. Wang REFID=47992