

**$K_0^*(1950)$** 

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

OMITTED FROM SUMMARY TABLE

Seen in partial-wave analysis of the  $K^- \pi^+$  system. Needs confirmation. **$K_0^*(1950)$  MASS**

VALUE (MeV)	DOCUMENT ID	TECN	CHG	COMMENT
<b><math>1945 \pm 10 \pm 20</math></b>	<sup>1</sup> ASTON	88	LASS	0 11 $K^- p \rightarrow K^- \pi^+ n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
$1820 \pm 40$	<sup>2</sup> ANISOVICH	97c	RVUE	11 $K^- p \rightarrow K^- \pi^+ n$
<sup>1</sup> We take the central value of the two solutions and the larger error given.				
<sup>2</sup> T-matrix pole. Reanalysis of ASTON 88 data.				

 **$K_0^*(1950)$  WIDTH**

VALUE (MeV)	DOCUMENT ID	TECN	CHG	COMMENT
<b><math>201 \pm 34 \pm 79</math></b>	<sup>3</sup> ASTON	88	LASS	0 11 $K^- p \rightarrow K^- \pi^+ n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
$250 \pm 100$	<sup>4</sup> ANISOVICH	97c	RVUE	11 $K^- p \rightarrow K^- \pi^+ n$
<sup>3</sup> We take the central value of the two solutions and the larger error given.				
<sup>4</sup> T-matrix pole. Reanalysis of ASTON 88 data.				

 **$K_0^*(1950)$  DECAY MODES**

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $K \pi$	$(52 \pm 14) \%$

 **$K_0^*(1950)$  BRANCHING RATIOS**

$\Gamma(K \pi)/\Gamma_{\text{total}}$	$\Gamma_1/\Gamma$			
VALUE	DOCUMENT ID	TECN	CHG	COMMENT
<b><math>0.52 \pm 0.08 \pm 0.12</math></b>	<sup>5</sup> ASTON	88	LASS	0 11 $K^- p \rightarrow K^- \pi^+ n$
<sup>5</sup> We take the central value of the two solutions and the larger error given.				

 **$K_0^*(1950)$  REFERENCES**

ANISOVICH	97c	PL B413 137	A.V. Anisovich, A.V. Sarantsev
ASTON	88	NP B296 493	D. Aston <i>et al.</i> (SLAC, NAGO, CINC, INUS)

**OTHER RELATED PAPERS**

ABLIKIM	05Q	PR D72 092002	M. Ablikim <i>et al.</i> (BES Collab.)
KATAEV	05	PAN 68 567	A.L. Kataev
		Translated from YAF 68 597.	
JAMIN	00	NP B587 331	M. Jamin <i>et al.</i>
SHAKIN	00	PR D62 114014	C.M. Shakin, H. Wang