

$K_0^*(1950)$

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

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
1945 ± 10 ± 20	¹ ASTON	88	LASS	0 11 $K^- p \rightarrow K^- \pi^+ n$
• • •	We do not use the following data for averages, fits, limits, etc. • • •			
1820 ± 40	² ANISOVICH	97C	RVUE	11 $K^- p \rightarrow K^- \pi^+ n$

¹ We take the central value of the two solutions and the larger error given.

² T-matrix pole. Reanalysis of ASTON 88 data.

$K_0^*(1950)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	CHG	COMMENT
201 ± 34 ± 79	³ ASTON	88	LASS	0 11 $K^- p \rightarrow K^- \pi^+ n$
• • •	We do not use the following data for averages, fits, limits, etc. • • •			
250 ± 100	⁴ ANISOVICH	97C	RVUE	11 $K^- p \rightarrow K^- \pi^+ n$

³ We take the central value of the two solutions and the larger error given.

⁴ T-matrix pole. Reanalysis of ASTON 88 data.

$K_0^*(1950)$ DECAY MODES

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

$K_0^*(1950)$ BRANCHING RATIOS

$\Gamma(K \pi)/\Gamma_{\text{total}}$	Γ_1/Γ			
VALUE	DOCUMENT ID	TECN	CHG	COMMENT
0.52 ± 0.08 ± 0.12	⁵ ASTON	88	LASS	0 11 $K^- p \rightarrow K^- \pi^+ n$

⁵ 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

JAMIN	00	NP B587 331	M. Jamin <i>et al.</i>
SHAKIN	00	PR D62 114014	C.M. Shakin, H. Wang