

$K_0^*(1950)$

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

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 $K^- p \rightarrow K^- \pi^+ n$
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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 $K^- p \rightarrow K^- \pi^+ n$
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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			
ASTON	88	NP B296 493	+Awaji, Bienz, Bird+	(SLAC, NAGO, CINC, INUS)	