

$K_2(1820)$

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

See our mini-review in the 2004 edition of this *Review* (PDG 04) under $K_2(1770)$. **$K_2(1820)$ MASS**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
1816 ± 13	¹ ASTON	93	LASS 11 $K^- p \rightarrow K^- \omega p$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
~ 1840	² DAUM	81C	CNTR 63 $K^- p \rightarrow K^- 2\pi p$
¹ From a partial wave analysis of the $K^- \omega$ system.			
² From a partial wave analysis of the $K^- 2\pi$ system.			

 $K_2(1820)$ WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
276 ± 35	³ ASTON	93	LASS 11 $K^- p \rightarrow K^- \omega p$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
~ 230	⁴ DAUM	81C	CNTR 63 $K^- p \rightarrow K^- 2\pi p$
³ From a partial wave analysis of the $K^- \omega$ system.			
⁴ From a partial wave analysis of the $K^- 2\pi$ system.			

 $K_2(1820)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $K \pi \pi$	
Γ_2 $K_2^*(1430) \pi$	seen
Γ_3 $K^*(892) \pi$	seen
Γ_4 $K f_2(1270)$	seen
Γ_5 $K \omega$	seen

 $K_2(1820)$ BRANCHING RATIOS

<u>$\Gamma(K_2^*(1430)\pi)/\Gamma(K\pi\pi)$</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	Γ_2/Γ_1
• • • We do not use the following data for averages, fits, limits, etc. • • •				
~ 0.77	DAUM	81C	CNTR 63 $K^- p \rightarrow \bar{K} 2\pi p$	

<u>$\Gamma(K^*(892)\pi)/\Gamma(K\pi\pi)$</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	Γ_3/Γ_1
• • • We do not use the following data for averages, fits, limits, etc. • • •				
~ 0.05	DAUM	81C	CNTR 63 $K^- p \rightarrow \bar{K} 2\pi p$	

$\Gamma(K f_2(1270))/\Gamma(K \pi \pi)$

Γ_4/Γ_1

VALUE DOCUMENT ID TECN COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

~ 0.18 DAUM 81C CNTR 63K⁻ p → $\bar{K} 2\pi p$

$K_2(1820)$ REFERENCES

PDG	04	PL B592 1	S. Eidelman <i>et al.</i>	
ASTON	93	PL B308 186	D. Aston <i>et al.</i>	(SLAC, NAGO, CINC, INUS)
DAUM	81C	NP B187 1	C. Daum <i>et al.</i>	(AMST, CERN, CRAC, MPIM+)