

K₂(1820)

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

See our mini-review in the 2004 edition of this *Review* (PDG 04) under K₂(1770).

K₂(1820) MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1816 ± 13	¹ ASTON	93	LASS 11 K ⁻ p → K ⁻ ω p
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
~ 1840	² DAUM	81C	CNTR 63 K ⁻ p → K ⁻ 2π p
¹ From a partial wave analysis of the K ⁻ ω system.			
² From a partial wave analysis of the K ⁻ 2π system.			

K₂(1820) WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
276 ± 35	³ ASTON	93	LASS 11 K ⁻ p → K ⁻ ω p
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
~ 230	⁴ DAUM	81C	CNTR 63 K ⁻ p → K ⁻ 2π p
³ From a partial wave analysis of the K ⁻ ω system.			
⁴ From a partial wave analysis of the K ⁻ 2π system.			

K₂(1820) DECAY MODES

Mode	Fraction (Γ _i /Γ)
Γ ₁ K π π	
Γ ₂ K ₂ [*] (1430) π	seen
Γ ₃ K [*] (892) π	seen
Γ ₄ K f ₂ (1270)	seen
Γ ₅ K ω	seen

K₂(1820) BRANCHING RATIOS

Γ(K ₂ [*] (1430)π)/Γ(K π π)	Γ ₂ /Γ ₁		
VALUE	DOCUMENT ID	TECN	COMMENT
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
~ 0.77	DAUM	81C	CNTR 63 K ⁻ p → \bar{K} 2π p

Γ(K [*] (892)π)/Γ(K π π)	Γ ₃ /Γ ₁		
VALUE	DOCUMENT ID	TECN	COMMENT
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
~ 0.05	DAUM	81C	CNTR 63 K ⁻ p → \bar{K} 2π 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>	(PDG Collab.)
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+)