

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)	EVTS	DOCUMENT ID	TECN	COMMENT
1819 ± 12 OUR AVERAGE				
1853 ± 27 ⁺¹⁸ ₋₃₅	4289	¹ AAIJ	17C LHCb	B ⁺ → J/ψ φ K ⁺
1816 ± 13		² ASTON	93 LASS	11K ⁻ p → K ⁻ ω p
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
~ 1840		³ DAUM	81C CNTR	63 K ⁻ p → K ⁻ 2π p
¹ From an amplitude analysis of the decay B ⁺ → J/ψ φ K ⁺ with a significance of 3.0 σ.				
² From a partial wave analysis of the K ⁻ ω system.				
³ From a partial wave analysis of the K ⁻ 2π system.				

K₂(1820) WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
264 ± 34 OUR AVERAGE				
167 ± 58 ⁺⁸² ₋₇₂	4289	¹ AAIJ	17C LHCb	B ⁺ → J/ψ φ K ⁺
276 ± 35		² ASTON	93 LASS	11K ⁻ p → K ⁻ ω p
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
~ 230		³ DAUM	81C CNTR	63 K ⁻ p → K ⁻ 2π p
¹ From an amplitude analysis of the decay B ⁺ → J/ψ φ K ⁺ with a significance of 3.0 σ.				
² From a partial wave analysis of the K ⁻ ω system.				
³ From a partial wave analysis of the K ⁻ 2π system.				

K₂(1820) DECAY MODES

Mode	Fraction (Γ _i /Γ)
Γ ₁ K π π	seen
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
Γ ₆ K φ	seen

K₂(1820) BRANCHING RATIOS

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

