

$K_2(1820)$

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

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

 $K_2(1820)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1816 ± 13	¹ ASTON 93	LASS	$11K^- p \rightarrow K^- \omega p$
• • • 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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
276 ± 35	³ ASTON 93	LASS	$11K^- p \rightarrow K^- \omega p$
• • • 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)
$\Gamma_1 K\pi\pi$	
$\Gamma_2 K_2^*(1430)\pi$	seen
$\Gamma_3 K^*(892)\pi$	seen
$\Gamma_4 Kf_2(1270)$	seen
$\Gamma_5 K\omega$	seen

 $K_2(1820)$ BRANCHING RATIOS

$\Gamma(K_2^*(1430)\pi)/\Gamma(K\pi\pi)$	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	$63K^- p \rightarrow \bar{K}2\pi p$

$\Gamma(K^*(892)\pi)/\Gamma(K\pi\pi)$	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	$63K^- p \rightarrow \bar{K}2\pi p$

$\Gamma(K f_2(1270))/\Gamma(K\pi\pi)$	Γ_4/Γ_1		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
~ 0.18	DAUM	81C CNTR	$63K^- p \rightarrow \bar{K}2\pi p$

$K_2(1820)$ 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+)