

$K_2(1820)$

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

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 $11K^- p \rightarrow K^- \omega p$ |
| • • • 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

| <u>VALUE (MeV)</u> | <u>DOCUMENT ID</u> | <u>TECN</u> | <u>COMMENT</u> |
|---|--------------------|-------------|---|
| 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) |
|-----------------------------|--------------------------------|
| 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 $63K^- p \rightarrow \bar{K} 2\pi p$ | |

| <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 $63K^- p \rightarrow \bar{K} 2\pi p$ | |

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

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 → $\bar{K} 2\pi p$ |

$K_2(1820)$ 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+) |