

**$K_2(2250)$** 

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

## OMITTED FROM SUMMARY TABLE

This entry contains various peaks in strange meson systems reported in the 2150–2260 MeV region, as well as enhancements seen in the antihyperon-nucleon system, either in the mass spectra or in the  $J^P = 2^-$  wave.

 **$K_2(2250)$  MASS**

| VALUE (MeV)   | EVTS | DOCUMENT ID                | TECN | CHG | COMMENT  |  |
|---|------|----------------------------|------|-----|--|--|
| <b>2247±17 OUR AVERAGE</b>  |      |                            |      |     |  |  |
| 2200±40   |      | <sup>1</sup> ARMSTRONG 83c | OMEG | –   | 18 $K^- p \rightarrow \Lambda \bar{p} X$       |  |
| 2235±50   |      | <sup>1</sup> BAUBILLIER 81 | HBC  | –   | 8 $K^- p \rightarrow \Lambda \bar{p} X$        |  |
| 2260±20   |      | <sup>1</sup> CLELAND 81    | SPEC | ±   | 50 $K^+ p \rightarrow \Lambda \bar{p} X$       |  |
| • • • We do not use the following data for averages, fits, limits, etc. • • • |      |                            |      |     |  |  |
| 2280±20   |      | TIKHOMIROV 03              | SPEC |     | 40.0 $\pi^- C \rightarrow K_S^0 K_S^0 K_L^0 X$ |  |
| 2147±4  | 37   | CHLIAPNIK...               | 79   | HBC | +  | 32 $K^+ p \rightarrow \bar{\Lambda} p X$ |
| 2240±20   | 20   | LISSAUER 70                | HBC  |     | 9 $K^+ p$                                      |  |

<sup>1</sup>  $J^P = 2^-$  from moments analysis.

 **$K_2(2250)$  WIDTH**

| VALUE (MeV)   | EVTS | DOCUMENT ID                | TECN | CHG | COMMENT  |  |
|---|------|----------------------------|------|-----|--|--|
| <b>180±30 OUR AVERAGE</b>   |      |                            |      |     |  |  |
| Error includes scale factor of 1.4.   |      |                            |      |     |  |  |
| 150±30  |      | <sup>2</sup> ARMSTRONG 83c | OMEG | –   | 18 $K^- p \rightarrow \Lambda \bar{p} X$       |  |
| 210±30  |      | <sup>2</sup> CLELAND 81    | SPEC | ±   | 50 $K^+ p \rightarrow \Lambda \bar{p} X$       |  |
| • • • We do not use the following data for averages, fits, limits, etc. • • • |      |                            |      |     |  |  |
| 180±60  |      | TIKHOMIROV 03              | SPEC |     | 40.0 $\pi^- C \rightarrow K_S^0 K_S^0 K_L^0 X$ |  |
| ~ 200   |      | <sup>2</sup> BAUBILLIER 81 | HBC  | –   | 8 $K^- p \rightarrow \Lambda \bar{p} X$        |  |
| ~ 40  | 37   | CHLIAPNIK...               | 79   | HBC | +  | 32 $K^+ p \rightarrow \bar{\Lambda} p X$ |
| 80±20   | 20   | LISSAUER 70                | HBC  |     | 9 $K^+ p$                                      |  |

<sup>2</sup>  $J^P = 2^-$  from moments analysis.

 **$K_2(2250)$  DECAY MODES**

| Mode                           |
|--------------------------------|
| $\Gamma_1$ $K \pi \pi$         |
| $\Gamma_2$ $K f_2(1270)$       |
| $\Gamma_3$ $K^*(892) f_0(980)$ |
| $\Gamma_4$ $p \bar{\Lambda}$   |

## $K_2(2250)$ REFERENCES

|              |     |                             |                                |                        |
|--------------|-----|-----------------------------|--------------------------------|------------------------|
| TIKHOMIROV   | 03  | PAN 66 828                  | G.D. Tikhomirov <i>et al.</i>  |                        |
|              |     | Translated from YAF 66 860. |                                |                        |
| ARMSTRONG    | 83C | NP B227 365                 | T.A. Armstrong <i>et al.</i>   | (BARI, BIRM, CERN+)    |
| BAUBILLIER   | 81  | NP B183 1                   | M. Baubillier <i>et al.</i>    | (BIRM, CERN, GLAS+) JP |
| CLELAND      | 81  | NP B184 1                   | W.E. Cleland <i>et al.</i>     | (PITT, GEVA, LAUS+) JP |
| CHLIAPNIK... | 79  | NP B158 253                 | P.V. Chliapnikov <i>et al.</i> | (CERN, BELG, MONS)     |
| LISSAUER     | 70  | NP B18 491                  | D. Lissauer <i>et al.</i>      | (LBL)                  |

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