

$K_1(1650)$

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

This entry contains various peaks in strange meson systems ($K^+ \phi$, $K \pi \pi$) reported in partial-wave analysis in the 1600–1900 mass region.

 $K_1(1650)$ MASS

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|--|------|-------------------------------------|------|--------|-----------------------------------|
| 1672 ± 50 OUR AVERAGE | | Error includes scale factor of 1.1. | | | |
| $1793 \pm 59^{+153}_{-101}$ | 4289 | ¹ AAIJ | 17C | LHCB | $B^+ \rightarrow J/\psi \phi K^+$ |
| 1650 ± 50 | | FRAME | 86 | OMEG + | 13 $K^+ p \rightarrow \phi K^+ p$ |
| ● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ● | | | | | |
| ~ 1840 | | ARMSTRONG | 83 | OMEG - | 18.5 $K^- p \rightarrow 3K p$ |
| ~ 1800 | | DAUM | 81C | CNTR - | 63 $K^- p \rightarrow K^- 2\pi p$ |
| ¹ From an amplitude analysis of the decay $B^+ \rightarrow J/\psi \phi K^+$ with a significance of 7.6 σ . | | | | | |

 $K_1(1650)$ WIDTH

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|--|------|-------------------|------|--------|-----------------------------------|
| 158 ± 50 OUR AVERAGE | | | | | |
| $365 \pm 157^{+138}_{-215}$ | 4289 | ² AAIJ | 17C | LHCB | $B^+ \rightarrow J/\psi \phi K^+$ |
| 150 ± 50 | | FRAME | 86 | OMEG + | 13 $K^+ p \rightarrow \phi K^+ p$ |
| ● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ● | | | | | |
| ~ 250 | | DAUM | 81C | CNTR - | 63 $K^- p \rightarrow K^- 2\pi p$ |
| ² From an amplitude analysis of the decay $B^+ \rightarrow J/\psi \phi K^+$ with a significance of 7.6 σ . | | | | | |

 $K_1(1650)$ DECAY MODES

| Mode | |
|------------|-------------|
| Γ_1 | $K \pi \pi$ |
| Γ_2 | $K \phi$ |

 $K_1(1650)$ REFERENCES

| | | | | |
|-----------|-----|----------------|------------------------------|---------------------------|
| AAIJ | 17C | PRL 118 022003 | R. Aaij <i>et al.</i> | (LHCb Collab.) |
| Also | | PR D95 012002 | R. Aaij <i>et al.</i> | (LHCb Collab.) |
| FRAME | 86 | NP B276 667 | D. Frame <i>et al.</i> | (GLAS) |
| ARMSTRONG | 83 | NP B221 1 | T.A. Armstrong <i>et al.</i> | (BARI, BIRM, CERN+) |
| DAUM | 81C | NP B187 1 | C. Daum <i>et al.</i> | (AMST, CERN, CRAC, MPIM+) |