

$K_1(1650)$

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

OMITTED FROM SUMMARY TABLE

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+)