$K_1(1650)$

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

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		$B^+ \to J/\psi\phi K^+$
1650 ± 50		FRAME	86	OMEG	+	$13\ K^+ p \to \phi K^+ p$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
~ 1840		ARMSTRONG	83	OMEG	−	$18.5\ K^- p \to 3K p$
~ 1800		DAUM	81C	CNTR	−	$63\ K^- p \to K^- 2\pi p$

[1] From an amplitude analysis of the decay $B^+ \to J/\psi\phi K^+$ 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		$B^+ \to J/\psi\phi K^+$
150 ± 50		FRAME	86	OMEG	+	$13\ K^+ p \to \phi K^+ p$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
~ 250		DAUM	81C	CNTR	−	$63\ K^- p \to K^- 2\pi p$

[2] From an amplitude analysis of the decay $B^+ \to J/\psi\phi K^+$ 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 *et al.*	(LHCb Collab.)
Also		PR D95 012002	R. Aaij *et al.*	(LHCb Collab.)
FRAME	86	NP B276 667	D. Frame *et al.*	(GLAS)
ARMSTRONG	83	NP B221 1	T.A. Armstrong *et al.*	(BARI, BIRM, CERN+)
DAUM	81C	NP B187 1	C. Daum *et al.*	(AMST, CERN, CRAC, MPIM+)