$K(1460)$

$$I(J^P) = \tfrac{1}{2}(0^-)$$

Observed in $K\pi\pi$ partial-wave analysis.

$K(1460)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •						
$1482.40 \pm 3.58 \pm 15.22$	894k	AAIJ	18AI	LHCB		$D^0 \to K^{\mp} 2\pi^{\pm} \pi^{\mp}$
~ 1460	63	DAUM	81C	CNTR	$-$	$K^- p \to K^- 2\pi p$
~ 1400	13	[1] BRANDENB...	76B	ASPK	$\pm$	$K^{\pm} p \to K^+ 2\pi p$

[1] Coupled mainly to $K f_0(1370)$. Decay into $K^*(892)\pi$ seen.

$K(1460)$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •						
$335.60 \pm 6.20 \pm 8.65$	894k	AAIJ	18AI	LHCB		$D^0 \to K^{\mp} 2\pi^{\pm} \pi^{\mp}$
~ 260	63	DAUM	81C	CNTR	$-$	$K^- p \to K^- 2\pi p$
~ 250	15	[1] BRANDENB...	76B	ASPK	$\pm$	$K^{\pm} p \to K^+ 2\pi p$

[1] Coupled mainly to $K f_0(1370)$. Decay into $K^*(892)\pi$ seen.

$K(1460)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$K^*(892)\pi$	seen
Γ_2	$K\rho$	seen
Γ_3	$K_0^*(1430)\pi$	seen
Γ_4	$K\phi$	seen

$K(1460)$ PARTIAL WIDTHS

$\Gamma(K^*(892)\pi)$ $\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad$ Γ_1

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
~ 109	DAUM	81C	CNTR	63 $K^- p \to K^- 2\pi p$

$\Gamma(K\rho)$ $\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad$ Γ_2

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
~ 34	DAUM	81C	CNTR	63 $K^- p \to K^- 2\pi p$

$\Gamma\left(K_0^*(1430)\pi\right)$ $\qquad$ Γ_3

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
~ 117	DAUM	81C CNTR	63 $K^- p \to K^- 2\pi p$

$\Gamma(K\phi)/\Gamma_{\text{total}}$ $\qquad$ Γ_4/Γ

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
seen	24k	[1] AAIJ	21E LHCB	$B^+ \to J/\psi\phi K^+$

[1] From an amplitude analysis of the decay $B^+ \to J/\psi\phi K^+$ with a significance of 12 σ.

$K(1460)$ REFERENCES

AAIJ	21E	PRL 127 082001	R. Aaij *et al.*	(LHCb Collab.)
AAIJ	18AI	EPJ C78 443	R. Aaij *et al.*	(LHCb Collab.)
DAUM	81C	NP B187 1	C. Daum *et al.*	(AMST, CERN, CRAC, MPIM+)
BRANDENB...	76B	PRL 36 1239	G.W. Brandenburg *et al.*	(SLAC) JP