

K(1460)

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

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 ± 3.58 ± 15.22	894k	AAIJ	18A1	LHCB	$D^0 \rightarrow K^\mp 2\pi^\pm \pi^\mp$
~ 1460	63	DAUM	81C	CNTR	– $K^- p \rightarrow K^- 2\pi p$
~ 1400	13	¹ BRANDENB...	76B	ASPK	± $K^\pm p \rightarrow K^\pm 2\pi p$
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 ± 6.20 ± 8.65	894k	AAIJ	18A1	LHCB	$D^0 \rightarrow K^\mp 2\pi^\pm \pi^\mp$
~ 260	63	DAUM	81C	CNTR	– $K^- p \rightarrow K^- 2\pi p$
~ 250	15	¹ BRANDENB...	76B	ASPK	± $K^\pm p \rightarrow K^\pm 2\pi p$
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

$\Gamma(K^*(892)\pi)$	Γ_1												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">VALUE (MeV)</th> <th style="text-align: left;">DOCUMENT ID</th> <th style="text-align: left;">TECN</th> <th style="text-align: left;">COMMENT</th> </tr> </thead> <tbody> <tr> <td colspan="4">● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●</td> </tr> <tr> <td>~ 109</td> <td>DAUM</td> <td>81C</td> <td>CNTR 63 $K^- p \rightarrow K^- 2\pi p$</td> </tr> </tbody> </table>		VALUE (MeV)	DOCUMENT ID	TECN	COMMENT	● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				~ 109	DAUM	81C	CNTR 63 $K^- p \rightarrow K^- 2\pi p$
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~ 109	DAUM	81C	CNTR 63 $K^- p \rightarrow K^- 2\pi p$										
$\Gamma(K\rho)$	Γ_2												
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~ 34	DAUM	81C	CNTR 63 $K^- p \rightarrow K^- 2\pi p$										

$\Gamma(K_0^*(1430)\pi)$

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 $K^- p \rightarrow K^- 2\pi p$

$\Gamma(K\phi)/\Gamma_{total}$

Γ_4/Γ

VALUE EVTS DOCUMENT ID TECN COMMENT

seen 24k ¹ AAIJ 21E LHCb $B^+ \rightarrow J/\psi\phi K^+$

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

K(1460) REFERENCES

AAIJ	21E	PRL 127 082001	R. Aaij <i>et al.</i>	(LHCb Collab.)
AAIJ	18A1	EPJ C78 443	R. Aaij <i>et al.</i>	(LHCb Collab.)
DAUM	81C	NP B187 1	C. Daum <i>et al.</i>	(AMST, CERN, CRAC, MPIM+)
BRANDENB...	76B	PRL 36 1239	G.W. Brandenburg <i>et al.</i>	(SLAC) JP