

$D_{s1}^*(2700)^\pm$ $I(J^P) = 0(1^-)$ **$D_{s1}^*(2700)^+$ MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2708.3^{+4.0}_{-3.4}				OUR AVERAGE
2699 ⁺¹⁴ ₋₇		¹ LEES	15C BABR	$B \rightarrow D D^0 K^+$
2709.2 \pm 1.9 \pm 4.5	52k	² AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
2710 \pm 2 ⁺¹² ₋₇	10.4k	³ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
2708 \pm 9 ⁺¹¹ ₋₁₀	182	BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
2694 \pm 8 ⁺¹³ ₋₃		LEES	15C BABR	$B^0 \rightarrow D^- D^0 K^+$
2707 \pm 8 \pm 8		LEES	15C BABR	$B^+ \rightarrow \bar{D}^0 D^0 K^+$
2688 \pm 4 \pm 3		⁴ AUBERT,BE	06E BABR	10.6 $e^+ e^- \rightarrow DKX$

¹ From a combined analysis of $B^0 \rightarrow D^- D^0 K^+$ and $B^+ \rightarrow \bar{D}^0 D^0 K^+$.² From the combined fit of the $D^+ K_S^0$ and $D^0 K^+$ modes in the model including the $D_{s2}^*(2573)^+$, $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$.³ From simultaneous fits to the two DK mass spectra and to the total $D^* K$ mass spectrum.⁴ Superseded by AUBERT 09AR. **$D_{s1}^*(2700)^+$ WIDTH**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
120\pm11				OUR AVERAGE
127 ⁺²⁴ ₋₁₉		⁵ LEES	15C BABR	$B \rightarrow D D^0 K^+$
115.8 \pm 7.3 \pm 12.1	52k	⁶ AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
149 \pm 7 ⁺³⁹ ₋₅₂	10.4k	⁷ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
108 \pm 23 ⁺³⁶ ₋₃₁	182	BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
145 \pm 24 ⁺²² ₋₁₄		LEES	15C BABR	$B^0 \rightarrow D^- D^0 K^+$
113 \pm 21 ⁺²⁰ ₋₁₆		LEES	15C BABR	$B^+ \rightarrow \bar{D}^0 D^0 K^+$
112 \pm 7 \pm 36		⁸ AUBERT,BE	06E BABR	10.6 $e^+ e^- \rightarrow DKX$

⁵ From a combined analysis of $B^0 \rightarrow D^- D^0 K^+$ and $B^+ \rightarrow \bar{D}^0 D^0 K^+$.⁶ From the combined fit of the $D^+ K_S^0$ and $D^0 K^+$ modes in the model including the $D_{s2}^*(2573)^+$, $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$.⁷ From simultaneous fits to the two DK mass spectra and to the total $D^* K$ mass spectrum.⁸ Superseded by AUBERT 09AR.

$D_{s1}^*(2700)^\pm$ DECAY MODES

Mode	
Γ_1	DK
Γ_2	$D^0 K^+$
Γ_3	$D^+ K_S^0$
Γ_4	$D^* K$
Γ_5	$D^{*0} K^+$
Γ_6	$D^{*+} K_S^0$

 $D_{s1}^*(2700)^\pm$ BRANCHING RATIOS **$\Gamma(D^* K)/\Gamma(DK)$ Γ_4/Γ_1**

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
$0.91 \pm 0.13 \pm 0.12$	10.4k	⁹ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$

⁹ From the average of the corresponding ratios with $D^{(*)0} K^+$ and $D^{(*)+} K_S^0$.

 $\Gamma(D^{*0} K^+)/\Gamma(D^0 K^+)$ Γ_5/Γ_2

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
$0.88 \pm 0.14 \pm 0.14$	7716	¹⁰ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$

¹⁰ From the $D^{*0} K^+$ and $D^0 K^+$, where $D^{*0} \rightarrow D^0 \pi^0$.

 $\Gamma(D^{*+} K_S^0)/\Gamma(D^+ K_S^0)$ Γ_6/Γ_3

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
$1.14 \pm 0.39 \pm 0.23$	2700	¹¹ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$

¹¹ From the $D^{*+} K_S^0$ and $D^+ K_S^0$, where $D^{*+} \rightarrow D^+ \pi^0$.

 $D_{s1}^*(2700)^\pm$ REFERENCES

LEES	15C	PR D91 052002	J.P. Lees <i>et al.</i>	(BABAR Collab.)
AAIJ	12AU	JHEP 1210 151	R. Aaij <i>et al.</i>	(LHCb Collab.)
AUBERT	09AR	PR D80 092003	B. Aubert <i>et al.</i>	(BABAR Collab.)
BRODZICKA	08	PRL 100 092001	J. Brodzicka <i>et al.</i>	(BELLE Collab.)
AUBERT,BE	06E	PRL 97 222001	B. Aubert <i>et al.</i>	(BABAR Collab.)