

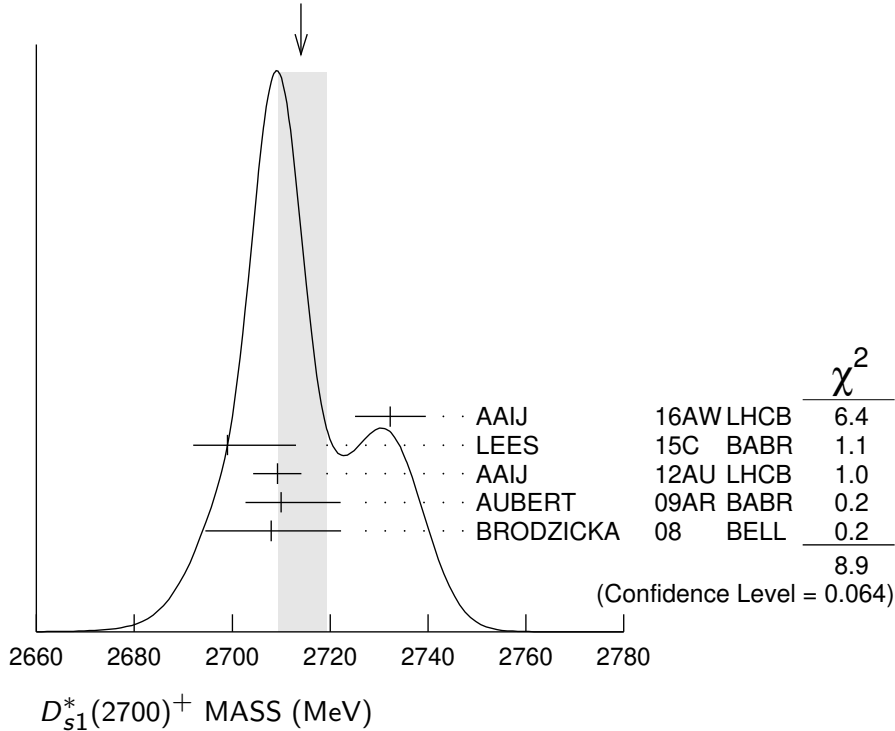
$D_{s1}^*(2700)^\pm$

$I(J^P) = 0(1^-)$

$D_{s1}^*(2700)^+$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2714 ± 5	OUR AVERAGE	Error includes scale factor of 1.5. See the ideogram below.		
2732.3 ± 4.3 ± 5.8	15.7k	AAIJ	16AW LHCB	$pp \rightarrow D^{*+} K_S^0 X$ at 7, 8 TeV
2699 $^{+14}_{-7}$		¹ LEES	15C BABR	$B \rightarrow D D^0 K^+$
2709.2 ± 1.9 ± 4.5	52k	² AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
2710 ± 2 $^{+12}_{-7}$	10.4k	³ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
2708 ± 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 ± 8 $^{+13}_{-3}$		LEES	15C BABR	$B^0 \rightarrow D^- D^0 K^+$
2707 ± 8 ± 8		LEES	15C BABR	$B^+ \rightarrow \bar{D}^0 D^0 K^+$
2688 ± 4 ± 3		⁴ AUBERT, BE	06E BABR	10.6 $e^+ e^- \rightarrow DKX$

WEIGHTED AVERAGE
2714±5 (Error scaled by 1.5)



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⁴ Superseded by AUBERT 09AR.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
122 ± 10	OUR AVERAGE			
136 ± 19 ± 24	15.7k	AAIJ	16AW LHCb	$pp \rightarrow D^{*+} K_S^0 X$ at 7, 8 TeV
127 $^{+24}_{-19}$		¹ LEES	15c BABR	$B \rightarrow D D^0 K^+$
115.8 ± 7.3 ± 12.1	52k	² AAIJ	12AU LHCb	$pp \rightarrow (DK)^+ X$ at 7 TeV
149 ± 7 $^{+39}_{-52}$	10.4k	³ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
108 ± 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 ± 24 $^{+22}_{-14}$		LEES	15c BABR	$B^0 \rightarrow D^- D^0 K^+$
113 ± 21 $^{+20}_{-16}$		LEES	15c BABR	$B^+ \rightarrow \bar{D}^0 D^0 K^+$
112 ± 7 ± 36		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.

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

Mode	Fraction (Γ_i/Γ)
Γ_1 DK	
Γ_2 $D^0 K^+$	seen
Γ_3 $D^+ K_S^0$	seen
Γ_4 $D^* K$	
Γ_5 $D^{*0} K^+$	seen
Γ_6 $D^{*+} K_S^0$	seen

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

$\Gamma(D^*K)/\Gamma(DK)$	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_4/Γ_1
0.91 ± 0.13 ± 0.12	10.4k	¹ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$	

¹ From the average of the corresponding ratios with $D^{(*)0} K^+$ and $D^{(*)+} K_S^0$.

$\Gamma(D^{*0}K^+)/\Gamma(D^0K^+)$					Γ_5/Γ_2
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
0.88±0.14±0.14	7716	¹ AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$	
¹ From the $D^{*0}K^+$ and D^0K^+ , where $D^{*0} \rightarrow D^0\pi^0$.					

$\Gamma(D^{*+}K_S^0)/\Gamma(D^+K_S^0)$					Γ_6/Γ_3
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
1.14±0.39±0.23	2700	¹ AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$	
¹ From the $D^{*+}K_S^0$ and $D^+K_S^0$, where $D^{*+} \rightarrow D^+\pi^0$.					

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

AAIJ	16AW	JHEP 1602 133	R. Aaij <i>et al.</i>	(LHCb Collab.)
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.)