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

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

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

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

[1] From a combined analysis of $B^0 \to D^- D^0 K^+$ and $B^+ \to \overline{D}^0 D^0 K^+$.
[2] From the combined fit of the $D^+ K^0_S$ 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[4] Superseded by AUBERT 09AR.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 ± 11 OUR AVERAGE					
$127\ ^{+24}_{-19}$		[5] LEES	15C	BABR	$B \to D D^0 K^+$
$115.8 \pm 7.3 \pm 12.1$	52k	[6] AAIJ	12AU	LHCB	$pp \to (DK)^+ X$ at 7 TeV
$149 \pm 7\ ^{+39}_{-52}$	10.4k	[7] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)} K X$
$108 \pm 23\ ^{+36}_{-31}$	182	BRODZICKA	08	BELL	$B^+ \to D^0 \overline{D}^0 K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$145 \pm 24\ ^{+22}_{-14}$		LEES	15C	BABR	$B^0 \to D^- D^0 K^+$
$113 \pm 21\ ^{+20}_{-16}$		LEES	15C	BABR	$B^+ \to \overline{D}^0 D^0 K^+$
$112 \pm 7 \pm 36$		[8] AUBERT,BE	06E	BABR	$10.6\ e^+e^- \to DKX$

[5] From a combined analysis of $B^0 \to D^- D^0 K^+$ and $B^+ \to \overline{D}^0 D^0 K^+$.
[6] From the combined fit of the $D^+ K^0_S$ 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[8] Superseded by AUBERT 09AR.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±0.13±0.12	10.4k	[9] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

[9] 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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
0.88±0.14±0.14	7716	[10] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

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

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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1.14±0.39±0.23	2700	[11] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

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

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

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