

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

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2708.3<sup>+4.0</sup><sub>-3.4</sub></b>				<b>OUR AVERAGE</b>
2699 <sup>+14</sup> <sub>-7</sub>		<sup>1</sup> LEES	15C BABR	$B \rightarrow D D^0 K^+$
2709.2 $\pm$ 1.9 $\pm$ 4.5	52k	<sup>2</sup> AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
2710 $\pm$ 2 <sup>+12</sup> <sub>-7</sub>	10.4k	<sup>3</sup> AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
2708 $\pm$ 9 <sup>+11</sup> <sub>-10</sub>	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 <sup>+13</sup> <sub>-3</sub>		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		<sup>4</sup> AUBERT, BE	06E BABR	10.6 $e^+ e^- \rightarrow DKX$

<sup>1</sup> From a combined analysis of  $B^0 \rightarrow D^- D^0 K^+$  and  $B^+ \rightarrow \bar{D}^0 D^0 K^+$ .<sup>2</sup> 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  $D_{sJ}^*(2860)^+$ .<sup>3</sup> From simultaneous fits to the two  $DK$  mass spectra and to the total  $D^* K$  mass spectrum.<sup>4</sup> Superseded by AUBERT 09AR. **$D_{s1}^*(2700)^+$  WIDTH**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>120<math>\pm</math>11</b>				<b>OUR AVERAGE</b>
127 <sup>+24</sup> <sub>-19</sub>		<sup>5</sup> LEES	15C BABR	$B \rightarrow D D^0 K^+$
115.8 $\pm$ 7.3 $\pm$ 12.1	52k	<sup>6</sup> AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
149 $\pm$ 7 <sup>+39</sup> <sub>-52</sub>	10.4k	<sup>7</sup> AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
108 $\pm$ 23 <sup>+36</sup> <sub>-31</sub>	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 <sup>+22</sup> <sub>-14</sub>		LEES	15C BABR	$B^0 \rightarrow D^- D^0 K^+$
113 $\pm$ 21 <sup>+20</sup> <sub>-16</sub>		LEES	15C BABR	$B^+ \rightarrow \bar{D}^0 D^0 K^+$
112 $\pm$ 7 $\pm$ 36		<sup>8</sup> AUBERT, BE	06E BABR	10.6 $e^+ e^- \rightarrow DKX$

<sup>5</sup> From a combined analysis of  $B^0 \rightarrow D^- D^0 K^+$  and  $B^+ \rightarrow \bar{D}^0 D^0 K^+$ .<sup>6</sup> 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  $D_{sJ}^*(2860)^+$ .<sup>7</sup> From simultaneous fits to the two  $DK$  mass spectra and to the total  $D^* K$  mass spectrum.<sup>8</sup> Superseded by AUBERT 09AR.

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

Mode	
$\Gamma_1$	$DK$
$\Gamma_2$	$D^0 K^+$
$\Gamma_3$	$D^+ K_S^0$
$\Gamma_4$	$D^* K$
$\Gamma_5$	$D^{*0} K^+$
$\Gamma_6$	$D^{*+} K_S^0$

 $D_{s1}^*(2700)^\pm$  BRANCHING RATIOS $\Gamma(D^* K)/\Gamma(DK)$   $\Gamma_4/\Gamma_1$ 

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

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

 $\Gamma(D^{*0} K^+)/\Gamma(D^0 K^+)$   $\Gamma_5/\Gamma_2$ 

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

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

 $\Gamma(D^{*+} K_S^0)/\Gamma(D^+ K_S^0)$   $\Gamma_6/\Gamma_3$ 

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

<sup>11</sup> 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.)