

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

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

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

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2709 ±4</b>	<b>OUR AVERAGE</b>			
2709.2±1.9± 4.5	52k	<sup>1</sup> AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
2710 ±2 $\begin{smallmatrix} +12 \\ -7 \end{smallmatrix}$	10.4k	<sup>2</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)} K X$
2708 ±9 $\begin{smallmatrix} +11 \\ -10 \end{smallmatrix}$	182	BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
2688 ±4 ± 3		<sup>3</sup> AUBERT,BE	06E BABR	10.6 $e^+e^- \rightarrow DKX$

<sup>1</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>2</sup> From simultaneous fits to the two  $DK$  mass spectra and to the total  $D^* K$  mass spectrum.

<sup>3</sup> Superseded by AUBERT 09AR.

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

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>117 ±13</b>	<b>OUR AVERAGE</b>			
115.8± 7.3±12.1	52k	<sup>4</sup> AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
149 ± 7 $\begin{smallmatrix} +39 \\ -52 \end{smallmatrix}$	10.4k	<sup>5</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)} K X$
108 ±23 $\begin{smallmatrix} +36 \\ -31 \end{smallmatrix}$	182	BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
112 ± 7 ±36		<sup>6</sup> AUBERT,BE	06E BABR	10.6 $e^+e^- \rightarrow DKX$

<sup>4</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>5</sup> From simultaneous fits to the two  $DK$  mass spectra and to the total  $D^* K$  mass spectrum.

<sup>6</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 Superseded by AUBERT 09AR.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

### $\Gamma(D^* K)/\Gamma(D K)$ $\Gamma_4/\Gamma_1$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
<b>0.91±0.13±0.12</b>	10.4k	<sup>7</sup> AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$

<sup>7</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
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• • • We do not use the following data for averages, fits, limits, etc. • • •

0.88±0.14±0.14	7716	<sup>8</sup> AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
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<sup>8</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
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• • • We do not use the following data for averages, fits, limits, etc. • • •

1.14±0.39±0.23	2700	<sup>9</sup> AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
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<sup>9</sup> From the  $D^{*+} K_S^0$  and  $D^+ K_S^0$ , where  $D^{*+} \rightarrow D^+ \pi^0$ .

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

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.)