

$$D_{sJ}^*(2860)^\pm$$

$$I(J^P) = 0(?^?)$$

OMITTED FROM SUMMARY TABLE

Observed by AUBERT, BE 06E and AUBERT 09AR in inclusive production of  $DK$  and  $D^*K$  in  $e^+e^-$  annihilation.  $J^P$  is natural.

### $D_{sJ}^*(2860)^+$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$2862 \pm 2 \begin{smallmatrix} +5 \\ -2 \end{smallmatrix}$	3122	<sup>1</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$

• • • We do not use the following data for averages, fits, limits, etc. • • •

$2856.6 \pm 1.5 \pm 5.0$		<sup>2</sup> AUBERT, BE	06E BABR	$e^+e^- \rightarrow DKX$
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<sup>1</sup> From simultaneous fits to the two  $DK$  mass spectra and to the total  $D^*K$  mass spectrum.

<sup>2</sup> Superseded by AUBERT 09AR.

### $D_{sJ}^*(2860)^+$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$48 \pm 3 \pm 6$	3122	<sup>3</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$

• • • We do not use the following data for averages, fits, limits, etc. • • •

$47 \pm 7 \pm 10$		<sup>4</sup> AUBERT, BE	06E BABR	$e^+e^- \rightarrow DKX$
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<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 Superseded by AUBERT 09AR.

### $D_{sJ}^*(2860)^\pm$ DECAY MODES

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

### $D_{sJ}^*(2860)^\pm$ BRANCHING RATIOS

$\Gamma(D^*K)/\Gamma(DK)$					$\Gamma_4/\Gamma_1$
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	
$1.10 \pm 0.15 \pm 0.19$	3122	<sup>5</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$	

<sup>5</sup> From the average of the corresponding ratios with  $D^{(*)0}K^+$  and  $D^{(*)+}K_S^0$ .

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

VALUE                      EVTS                      DOCUMENT ID                      TECN                      COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

1.04±0.17±0.20                      2241                      <sup>6</sup> AUBERT                      09AR BABR                       $e^+e^- \rightarrow D^{(*)}KX$

<sup>6</sup> From the  $D^{*0}K^+$  and  $D^0K^+$ , where  $D^{*0} \rightarrow D^0\pi^0$ .

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

VALUE                      EVTS                      DOCUMENT ID                      TECN                      COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

1.38±0.35±0.49                      881                      <sup>7</sup> AUBERT                      09AR BABR                       $e^+e^- \rightarrow D^{(*)}KX$

<sup>7</sup> From the  $D^{*+}K_S^0$  and  $D^+K_S^0$ , where  $D^{*+} \rightarrow D^+\pi^0$ .

**$D_{sJ}^*(2860)^\pm$  REFERENCES**

AUBERT	09AR	PR D80 092003	B. Aubert <i>et al.</i>	(BABAR Collb.)
AUBERT,BE	06E	PRL 97 222001	B. Aubert <i>et al.</i>	(BABAR Collab.)