

$D_{s2}(2573)^\pm$ 

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

 $J^P$  is natural, width and decay modes consistent with  $2^+$ .

### $D_{s2}(2573)^\pm$ MASS

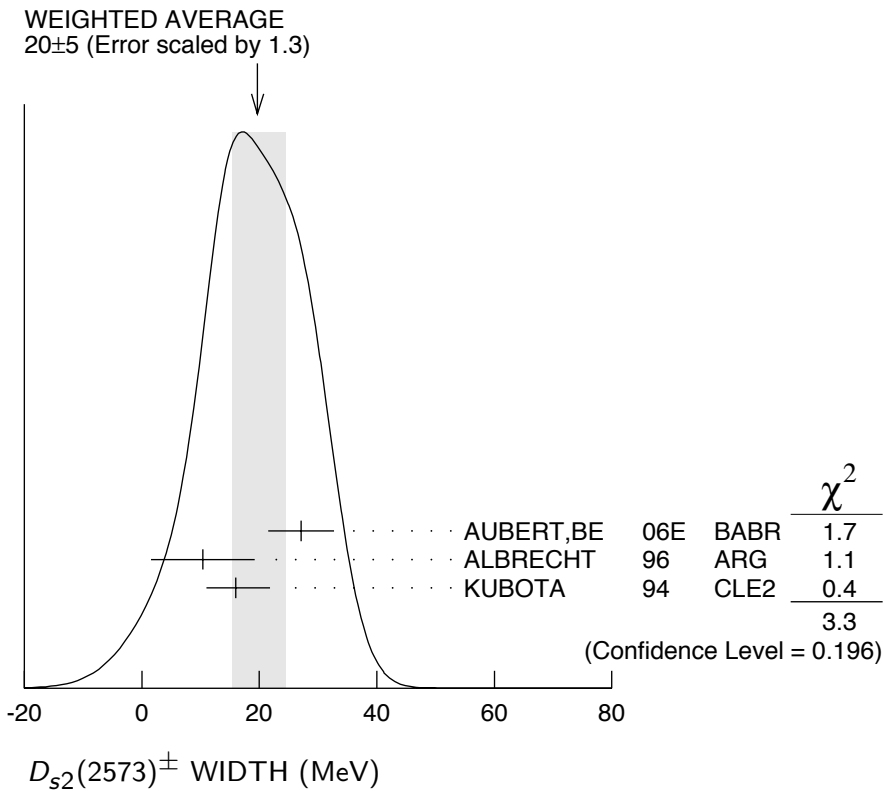
VALUE (MeV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>2572.6 ± 0.9 OUR AVERAGE</b>					
2572.2 ± 0.3 ± 1.0		AUBERT,BE	06E	BABR	$e^+ e^- \rightarrow DKX$
2574.5 ± 3.3 ± 1.6		ALBRECHT	96	ARG	$e^+ e^- \rightarrow D^0 K^+ X$
2573.2 <sup>+1.7</sup> <sub>-1.6</sub> ± 0.9	217	KUBOTA	94	CLE2 +	$e^+ e^- \sim 10.5$ GeV
• • • We do not use the following data for averages, fits, limits, etc. • • •					
2570.0 ± 4.3	25	<sup>1</sup> EVDOKIMOV	04	SELX	600 $\Sigma^- A \rightarrow D^0 K^+ X$
2568.6 ± 3.2	64	<sup>2</sup> HEISTER	02B	ALEP	$e^+ e^- \rightarrow D^0 K^+ X$
<sup>1</sup> Not independent of the mass difference below.					
<sup>2</sup> Calculated using $m_{D^0} = 1864.5 \pm 0.5$ MeV and the mass difference below.					

### $m_{D_{s2}(2573)^\pm} - m_{D^0}$

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>704 ± 3 ± 1</b>	64	HEISTER	02B	ALEP	$e^+ e^- \rightarrow D^0 K^+ X$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
705.4 ± 4.3	25	<sup>3</sup> EVDOKIMOV	04	SELX	600 $\Sigma^- A \rightarrow D^0 K^+ X$
<sup>3</sup> Systematic errors not estimated.					

### $D_{s2}(2573)^\pm$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	CHG	COMMENT
<b>20 ± 5 OUR AVERAGE</b>					
Error includes scale factor of 1.3. See the ideogram below.					
27.1 ± 0.6 ± 5.6		AUBERT,BE	06E	BABR	$e^+ e^- \rightarrow DKX$
10.4 ± 8.3 ± 3.0		ALBRECHT	96	ARG	$e^+ e^- \rightarrow D^0 K^+ X$
16 <sup>+5</sup> <sub>-4</sub> ± 3	217	KUBOTA	94	CLE2 +	$e^+ e^- \sim 10.5$ GeV
• • • We do not use the following data for averages, fits, limits, etc. • • •					
14 <sup>+9</sup> <sub>-6</sub>	25	<sup>4</sup> EVDOKIMOV	04	SELX	600 $\Sigma^- A \rightarrow D^0 K^+ X$
<sup>4</sup> Systematic errors not estimated.					



### $D_{s2}(2573)^+$ DECAY MODES

$D_{s2}(2573)^-$  modes are charge conjugates of the modes below.

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $D^0 K^+$	seen
$\Gamma_2$ $D^*(2007)^0 K^+$	not seen

### $D_{s2}(2573)^+$ BRANCHING RATIOS

$\Gamma(D^0 K^+)/\Gamma_{\text{total}}$						$\Gamma_1/\Gamma$
VALUE	EVTS	DOCUMENT ID	TECN	CHG	COMMENT	
seen	217	KUBOTA	94	CLE2	$\pm$ $e^+ e^- \sim 10.5$ GeV	

$\Gamma(D^*(2007)^0 K^+)/\Gamma(D^0 K^+)$						$\Gamma_2/\Gamma_1$
VALUE	CL%	DOCUMENT ID	TECN	CHG	COMMENT	
<b>&lt;0.33</b>	90	KUBOTA	94	CLE2	$+$ $e^+ e^- \sim 10.5$ GeV	

### $D_{s2}(2573)^\pm$ REFERENCES

AUBERT, BE	06E	PRL 97 222001	B. Aubert <i>et al.</i>	(BABAR Collab.)
EVDOKIMOV	04	PRL 93 242001	A.V. Evdokimov <i>et al.</i>	(SELEX Collab.)
HEISTER	02B	PL B526 34	A. Heister <i>et al.</i>	(ALEPH Collab.)
ALBRECHT	96	ZPHY C69 405	H. Albrecht <i>et al.</i>	(ARGUS Collab.)
KUBOTA	94	PRL 72 1972	Y. Kubota <i>et al.</i>	(CLEO Collab.)

————— **OTHER RELATED PAPERS** —————

COLANGELO	06	PL B642 48	P. Colangelo <i>et al.</i>	
CLOSE	05C	PR D72 094004	F.E. Close, E.S. Swanson	(OXFTP)
SEMENOV	99	SPU 42 847	S.V. Semenov	
		Translated from UFN 42 937.		

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