

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

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

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

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

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
<b>2572.4 ± 1.5 OUR AVERAGE</b>					
2568.6 ± 3.2	64	<sup>1</sup> HEISTER	02B ALEP		$e^+e^- \rightarrow D^0 K^+ X$
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

<sup>1</sup> Calculated using  $m_{D^0} = 1864.5 \pm 0.5$  and the mass difference below.

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

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
<b>704 ± 3 ± 1</b>	64	HEISTER	02B ALEP		$e^+e^- \rightarrow D^0 K^+ X$

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

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
<b>15<sup>+5</sup><sub>-4</sub> OUR AVERAGE</b>					
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

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

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

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

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

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

SEMENOV	99	SPU 42 847	S.V. Semenov
		Translated from UFN 42 937.	

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