

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

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

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>
2573.5 ± 1.7 OUR AVERAGE					
2574.5 ± 3.3 ± 1.6		ALBRECHT	96 ARG		$e^+ e^- \rightarrow D^0 K^+ X$
2573.2 ^{+1.7} _{-1.6} ± 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	¹ EVDOKIMOV	04 SELX		600 $\Sigma^- A \rightarrow D^0 K^+ X$
2568.6 ± 3.2	64	² HEISTER	02B ALEP		$e^+ e^- \rightarrow D^0 K^+ X$

¹ Not independent of the mass difference below.

² Calculated using $m_{D^0} = 1864.5 \pm 0.5$ MeV 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>COMMENT</u>
704 ± 3 ± 1				
	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	³ EVDOKIMOV	04 SELX	600 $\Sigma^- A \rightarrow D^0 K^+ X$

³ Systematic errors not estimated.

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

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
15⁺⁵₋₄ OUR AVERAGE					
10.4 ± 8.3 ± 3.0		ALBRECHT	96 ARG		$e^+ e^- \rightarrow D^0 K^+ X$
16 ⁺⁵ ₋₄ ± 3	217	KUBOTA	94 CLE2	+	$e^+ e^- \sim 10.5$ GeV
• • • We do not use the following data for averages, fits, limits, etc. • • •					
14 ⁺⁹ ₋₆	25	⁴ EVDOKIMOV	04 SELX		600 $\Sigma^- A \rightarrow D^0 K^+ X$

⁴ Systematic errors not estimated.

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

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

Mode	Fraction (Γ_i/Γ)
Γ_1 $D^0 K^+$	seen
Γ_2 $D^*(2007)^0 K^+$	not seen

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

$\Gamma(D^0 K^+)/\Gamma_{\text{total}}$						Γ_1/Γ
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>	
seen	217	KUBOTA	94 CLE2	\pm	$e^+ e^- \sim$	10.5 GeV

$\Gamma(D^*(2007)^0 K^+)/\Gamma(D^0 K^+)$						Γ_2/Γ_1
<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>	
<0.33	90	KUBOTA	94 CLE2	+	$e^+ e^- \sim$	10.5 GeV

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

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

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.		