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

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

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

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

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
2573.5±1.7 OUR AVERAGE						
$2574.5 \pm 3.3 \pm 1.6$		ALBRECHT	96	ARG		$e^+e^- \to D^0K^+X$
$2573.2^{+1.7}_{-1.6} \pm 0.9$	217	KUBOTA	94	CLE2	+	e^+e^- ~ 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 $\Sigma^- A \to D^0K^+X$
2568.6 ± 3.2	64	[2] HEISTER	02B	ALEP		$e^+e^- \to D^0K^+X$

[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.

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

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

[3] Systematic errors not estimated.

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

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

[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^0K^+	seen
Γ_2	$D^*(2007)^0K^+$	not seen

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

$\Gamma(D^0K^+)/\Gamma_{total}$ Γ_1/Γ

VALUE	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
seen	217	KUBOTA	94	CLE2	$\pm$	$e^+e^-\sim$ 10.5 GeV

$\Gamma(D^*(2007)^0K^+)/\Gamma(D^0K^+)$ Γ_2/Γ_1

VALUE	CL%	DOCUMENT ID		TECN	CHG	COMMENT
<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 *et al.*	(SELEX Collab.)
HEISTER	02B	PL B526 34	A. Heister *et al.*	(ALEPH Collab.)
ALBRECHT	96	ZPHY C69 405	H. Albrecht *et al.*	(ARGUS Collab.)
KUBOTA	94	PRL 72 1972	Y. Kubota *et al.*	(CLEO Collab.)

OTHER RELATED PAPERS

CLOSE	05C	PR D72 094004	F.E. Close, E.S. Swanson	(OXFTP)
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