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

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

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

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

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
2572.6±0.9 OUR AVERAGE						
2572.2±0.3±1.0		AUBERT,BE	06E	BABR		$e^+e^- \rightarrow DKX$
2574.5±3.3±1.6		ALBRECHT	96	ARG		$e^+e^- \rightarrow D^0K^+X$
$2573.2^{+1.7}_{-1.6}\pm0.9$	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 $\Sigma^- A \rightarrow D^0K^+X$
2568.6±3.2	64	[2] HEISTER	02B	ALEP		$e^+e^- \rightarrow D^0K^+X$

[1] Not independent of the mass difference below.
[2] Calculated using m_{D^0}= 1864.5 ± 0.5 MeV and the mass difference below.

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

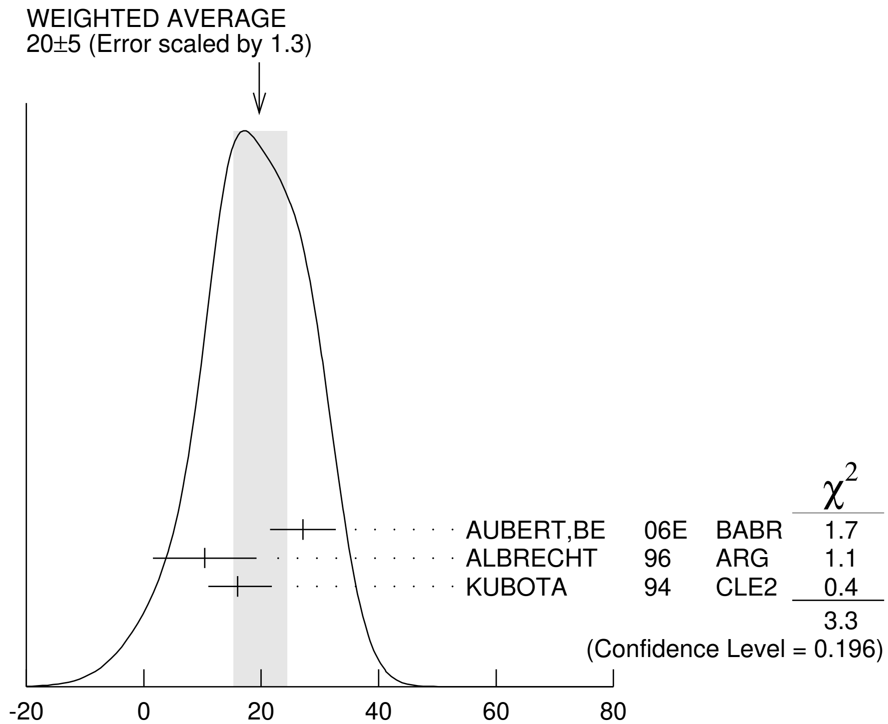
VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
704 ±3 ±1	64	HEISTER	02B	ALEP	$e^+e^- \rightarrow D^0K^+X$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
705.4±4.3	25	[3] EVDOKIMOV	04	SELX	600 $\Sigma^- A \rightarrow D^0K^+X$

[3] Systematic errors not estimated.

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

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	CHG	COMMENT
20 ±5 OUR AVERAGE	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		$e^+e^- \rightarrow D^0K^+X$
$16\ ^{+5}_{-4}\ \pm3$	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 $\Sigma^- A \rightarrow D^0K^+X$

[4] Systematic errors not estimated.



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

$D_{s2}(2573)^+$ 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

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

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

AUBERT,BE 06E PRL 97 222001 B. Aubert et al. (BABAR Collab.)
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

COLANGELO	06	PL B642 48	P. Colangelo *et al.*	
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.		