$D_2^*(2460)^\pm$

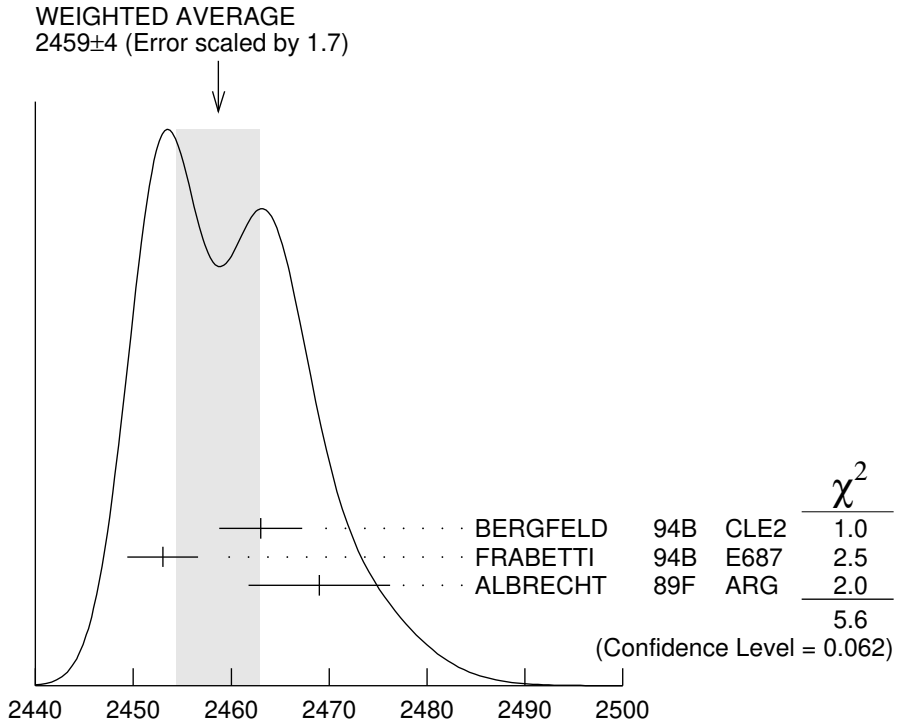
$I(J^P) = \frac{1}{2}(2^+)$

$J^P = 2^+$ assignment strongly favored(ALBRECHT 89B).

$D_2^*(2460)^\pm$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
2459 ±4 OUR AVERAGE		Error includes scale factor of 1.7. See the ideogram below.			
2463 ±3 ±3	310	BERGFELD	94B	CLE2	$e^+e^- \to D^0\pi^+X$
2453 ±3 ±2	185	FRABETTI	94B	E687	γBe $\to D^0\pi^+X$
2469 ±4 ±6		ALBRECHT	89F	ARG	$e^+e^- \to D^0\pi^+X$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
2467.6±1.5±0.8	3.5k	[1] LINK	04A	FOCS	γ A

[1] Fit includes the contribution from $D_0^*(2400)^\pm$. Not independent of the corresponding mass difference measurement, $(m_{D_2^*(2460)^\pm}) - (m_{D_2^*(2460)^0})$.



$m_{D_2^*(2460)^\pm} - m_{D_2^*(2460)^0}$

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
2.4±1.7 OUR AVERAGE				
3.1±1.9±0.9	LINK	04A	FOCS	γ A
− 2 ±4 ±4	BERGFELD	94B	CLE2	$e^+e^- \to$ hadrons
0 ±4	FRABETTI	94B	E687	γBe $\to D\pi X$
14 ±5 ±8	ALBRECHT	89F	ARG	$e^+e^- \to D^0\pi^+X$

$D_2^*(2460)^\pm$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
29 ± 5 OUR AVERAGE					
$34.1 \pm 6.5 \pm 4.2$	3.5k	[2] LINK	04A	FOCS	γ A
$27\ ^{+11}_{-8} \pm 5$	310	BERGFELD	94B	CLE2	$e^+e^- \rightarrow D^0\pi^+$X
$23 \pm 9 \pm 5$	185	FRABETTI	94B	E687	γBe $\rightarrow D^0\pi^+$X

[2] Fit includes the contribution from $D_0^*(2400)^\pm$.

$D_2^*(2460)^\pm$ DECAY MODES

$D_2^*(2460)^-$ modes are charge conjugates of modes below.

	Mode	Fraction (Γ_i/Γ)
Γ_1	$D^0\pi^+$	seen
Γ_2	$D^{*0}\pi^+$	seen
Γ_3	$D^+\pi^+\pi^-$	not seen
Γ_4	$D^{*+}\pi^+\pi^-$	not seen

$D_2^*(2460)^\pm$ BRANCHING RATIOS

$\Gamma(D^0\pi^+)/\Gamma_{total}$ Γ_1/Γ

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	ALBRECHT	89F	ARG	$e^+e^- \rightarrow D^0\pi^+$X

$\Gamma(D^0\pi^+)/\Gamma(D^{*0}\pi^+)$ Γ_1/Γ_2

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
1.9±1.1±0.3	BERGFELD	94B	CLE2	e^+e^- → hadrons

$D_2^*(2460)^\pm$ REFERENCES

LINK	04A	PL B586 11	J.M. Link *et al.*	(FOCUS Collab.)
BERGFELD	94B	PL B340 194	T. Bergfeld *et al.*	(CLEO Collab.)
FRABETTI	94B	PRL 72 324	P.L. Frabetti *et al.*	(FNAL E687 Collab.)
ALBRECHT	89B	PL B221 422	H. Albrecht *et al.*	(ARGUS Collab.)
ALBRECHT	89F	PL B231 208	H. Albrecht *et al.*	(ARGUS Collab.)

OTHER RELATED PAPERS

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