$D_2^*(2460)^0$

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

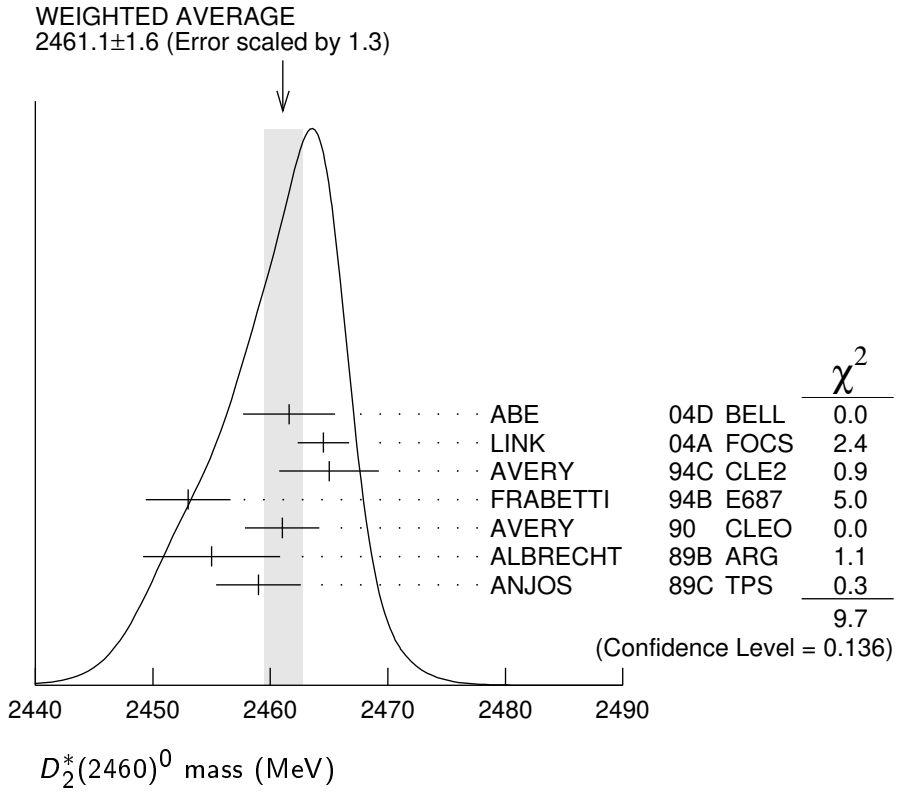
$J^P = 2^+$ assignment strongly favored(ALBRECHT 89B).

$D_2^*(2460)0$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
2461.1±1.6 OUR AVERAGE		Error includes scale factor of 1.3. See the ideogram below.			
2461.6±2.1±3.3		[1] ABE	04D	BELL	$B^- \to D^+\pi^-\pi^-$
2464.5±1.1±1.9	5.8k	[1] LINK	04A	FOCS	γ A
2465 ±3 ±3	486	AVERY	94C	CLE2	$e^+e^- \to D^+\pi^-$X
2453 ±3 ±2	128	FRABETTI	94B	E687	γBe $\to D^+\pi^-$X
2461 ±3 ±1	440	AVERY	90	CLEO	$e^+e^- \to D^{*+}\pi^-$X
2455 ±3 ±5	337	ALBRECHT	89B	ARG	$e^+e^- \to D^+\pi^-$X
2459 ±3 ±2	153	ANJOS	89C	TPS	$\gamma N \to D^+\pi^-$X
• • • We do not use the following data for averages, fits, limits, etc. • • •					
2463.3±0.6±0.8	20k	ABULENCIA	06A	CDF	1900 $p\overline{p} \to D^+\pi^-X$
2461 ±6	126	[2] ABREU	98M	DLPH	e^+e^-
2466 ±7	1	ASRATYAN	95	BEBC	53,40 $\nu(\overline{\nu}) \to p + X$, $d + X$

[1] Fit includes the contribution from $D_0^*(2400)^0$.

[2] No systematic error given.



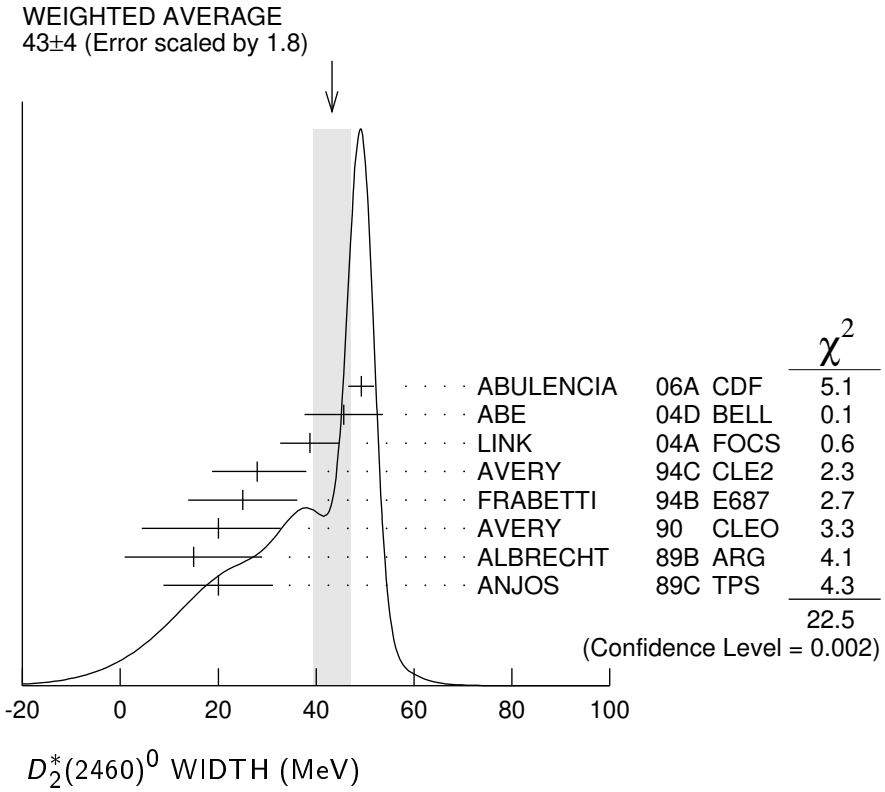
$m_{D_2^{*0}} - m_{D^+}$

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
593.9±0.6±0.5	20k	ABULENCIA	06A	CDF	1900 $p\overline{p} \rightarrow D^+\pi^- X$

$D_2^*(2460)^0$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
43 ± 4 OUR AVERAGE Error includes scale factor of 1.8. See the ideogram below.					
49.2± 2.3± 1.3	20k	ABULENCIA	06A	CDF	1900 $p\overline{p} \rightarrow D^+\pi^- X$
45.6± 4.4± 6.7		[3] ABE	04D	BELL	$B^- \rightarrow D^+\pi^-\pi^-$
38.7± 5.3± 2.9	5.8k	[3] LINK	04A	FOCS	γ A
$28\ ^{+\ 8}_{-\ 7}\ \pm 6$	486	AVERY	94C	CLE2	$e^+e^- \rightarrow D^+\pi^- X$
25 ±10 ± 5	128	FRABETTI	94B	E687	γ Be $\rightarrow D^+\pi^- X$
$20\ ^{+\ 9}_{-12}\ ^{+\ 9}_{-10}$	440	AVERY	90	CLEO	$e^+e^- \rightarrow D^{*+}\pi^- X$
$15\ ^{+13}_{-10}\ ^{+\ 5}_{-10}$	337	ALBRECHT	89B	ARG	$e^+e^- \rightarrow D^+\pi^- X$
20 ±10 ± 5	153	ANJOS	89C	TPS	$\gamma N \rightarrow D^+\pi^- X$

[3] Fit includes the contribution from $D_0^*(2400)^0$.



$D_2^*(2460)^0$ DECAY MODES

$\overline{D}_2^*(2460)^0$ modes are charge conjugates of modes below.

	Mode	Fraction (Γ_i/Γ)
Γ_1	$D^+\pi^-$	seen
Γ_2	$D^*(2010)^+\pi^-$	seen
Γ_3	$D^0\pi^+\pi^-$	not seen
Γ_4	$D^{*0}\pi^+\pi^-$	not seen

$D_2^*(2460)^0$ BRANCHING RATIOS

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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
seen	337	ALBRECHT	89B	ARG	$e^+e^- \to D^+\pi^-X$
seen		ANJOS	89C	TPS	$\gamma N \to D^+\pi^-X$

$\Gamma(D^*(2010)^+\pi^-)/\Gamma_{total}$ Γ_2/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
seen	ACKERSTAFF	97W	OPAL	$e^+e^- \to D^{*+}\pi^-X$
seen	AVERY	90	CLEO	$e^+e^- \to D^{*+}\pi^-X$
seen	ALBRECHT	89H	ARG	$e^+e^- \to D^*\pi^-X$

$\Gamma(D^+\pi^-)/\Gamma(D^*(2010)^+\pi^-)$ Γ_1/Γ_2

VALUE	DOCUMENT ID		TECN	COMMENT
2.3±0.6 OUR AVERAGE				
2.2±0.7±0.6	AVERY	94C	CLE2	$e^+e^- \to D^{*+}\pi^-X$
2.3±0.8	AVERY	90	CLEO	e^+e^-
3.0±1.1±1.5	ALBRECHT	89H	ARG	$e^+e^- \to D^*\pi^-X$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1.9±0.5	ABE	04D	BELL	$B^- \to D^{(*)+}\pi^-\pi^-$

$D_2^*(2460)^0$ REFERENCES

ABULENCIA	06A	PR D73 051104	A. Abulencia *et al.*	(CDF Collab.)
ABE	04D	PR D69 112002	K. Abe *et al.*	(BELLE Collab.)
LINK	04A	PL B586 11	J.M. Link *et al.*	(FOCUS Collab.)
ABREU	98M	PL B426 231	P. Abreu *et al.*	(DELPHI Collab.)
ACKERSTAFF	97W	ZPHY C76 425	K. Ackerstaff *et al.*	(OPAL Collab.)
ASRATYAN	95	ZPHY C68 43	A.E. Asratyan *et al.*	(BIRM, BELG, CERN+)
AVERY	94C	PL B331 236	P. Avery *et al.*	(CLEO Collab.)
FRABETTI	94B	PRL 72 324	P.L. Frabetti *et al.*	(FNAL E687 Collab.)
AVERY	90	PR D41 774	P. Avery, D. Besson	(CLEO Collab.)
ALBRECHT	89B	PL B221 422	H. Albrecht *et al.*	(ARGUS Collab.) JP
ALBRECHT	89H	PL B232 398	H. Albrecht *et al.*	(ARGUS Collab.) JP
ANJOS	89C	PRL 62 1717	J.C. Anjos *et al.*	(FNAL E691 Collab.)

OTHER RELATED PAPERS

ABAZOV	05O	PRL 95 171803	V.M. Abazov *et al.*	(D0 Collab.)
ACOSTA	05F	PR D71 051103R	D. Acosta *et al.*	(CDF Collab.)
CLOSE	05C	PR D72 094004	F.E. Close, E.S. Swanson	(OXFTP)
SEMENOV	99	SPU 42 847 Translated from UFN 42 937.	S.V. Semenov	