

$D_2^*(2460)^0$

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

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

$D_2^*(2460)^0$ MASS

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
2458.9±2.0 OUR AVERAGE		Error includes scale factor of 1.2.		
2465 ±3 ±3	486	AVERY	94C CLE2	$e^+e^- \rightarrow D^+\pi^-X$
2453 ±3 ±2	128	FRABETTI	94B E687	$\gamma Be \rightarrow D^+\pi^-X$
2461 ±3 ±1	440	AVERY	90 CLEO	$e^+e^- \rightarrow D^{*+}\pi^-X$
2455 ±3 ±5	337	ALBRECHT	89B ARG	$e^+e^- \rightarrow D^+\pi^-X$
2459 ±3 ±2	153	ANJOS	89C TPS	$\gamma N \rightarrow D^+\pi^-X$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
2461 ±6	126	¹ ABREU	98M DLPH	e^+e^-
2466 ±7	1	ASRATYAN	95 BEBC	$53,40 \nu(\bar{\nu}) \rightarrow p + X,$ $d + X$

¹No systematic error given.

$D_2^*(2460)^0$ WIDTH

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
23± 5 OUR AVERAGE				
$28^{+8}_{-7} \pm 6$	486	AVERY	94C CLE2	$e^+e^- \rightarrow D^+\pi^-X$
$25 \pm 10 \pm 5$	128	FRABETTI	94B E687	$\gamma Be \rightarrow D^+\pi^-X$
20^{+9+9}_{-12-10}	440	AVERY	90 CLEO	$e^+e^- \rightarrow D^{*+}\pi^-X$
15^{+13+5}_{-10-10}	337	ALBRECHT	89B ARG	$e^+e^- \rightarrow D^+\pi^-X$
$20 \pm 10 \pm 5$	153	ANJOS	89C TPS	$\gamma N \rightarrow D^+\pi^-X$

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

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

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad D^+\pi^-$	seen
$\Gamma_2 \quad D^*(2010)^+\pi^-$	seen

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

$\Gamma(D^+\pi^-)/\Gamma_{\text{total}}$	Γ_1/Γ			
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
seen	337	ALBRECHT	89B ARG	$e^+e^- \rightarrow D^+\pi^-X$
seen		ANJOS	89C TPS	$\gamma N \rightarrow D^+\pi^-X$

$\Gamma(D^*(2010)^+ \pi^-) / \Gamma_{\text{total}}$				Γ_2 / Γ
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
seen	ACKERSTAFF	97W OPAL	$e^+ e^- \rightarrow D^{*+} \pi^- X$	
seen	AVERY	90 CLEO	$e^+ e^- \rightarrow D^{*+} \pi^- X$	
seen	ALBRECHT	89H ARG	$e^+ e^- \rightarrow D^* \pi^- X$	
$\Gamma(D^+ \pi^-) / \Gamma(D^*(2010)^+ \pi^-)$				Γ_1 / Γ_2
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
2.3 ± 0.6 OUR AVERAGE				
2.2 ± 0.7 ± 0.6	AVERY	94C CLE2	$e^+ e^- \rightarrow D^{*+} \pi^- X$	
2.3 ± 0.8	AVERY	90 CLEO	$e^+ e^-$	
3.0 ± 1.1 ± 1.5	ALBRECHT	89H ARG	$e^+ e^- \rightarrow D^* \pi^- X$	

$D_2^*(2460)^0$ REFERENCES

ABREU	98M	PL B426 231	P. Abreu <i>et al.</i>	(DELPHI Collab.)
ACKERSTAFF	97W	ZPHY C76 425	K. Ackerstaff <i>et al.</i>	(OPAL Collab.)
ASRATYAN	95	ZPHY C68 43	A.E. Asratyan <i>et al.</i>	(BIRM, BELG, CERN+)
AVERY	94C	PL B331 236	P. Avery <i>et al.</i>	(CLEO Collab.)
FRABETTI	94B	PRL 72 324	P.L. Frabetti <i>et al.</i>	(FNAL E687 Collab.)
AVERY	90	PR D41 774	P. Avery, D. Besson	(CLEO Collab.)
ALBRECHT	89B	PL B221 422	H. Albrecht <i>et al.</i>	(ARGUS Collab.) JP
ALBRECHT	89H	PL B232 398	H. Albrecht <i>et al.</i>	(ARGUS Collab.) JP
ANJOS	89C	PRL 62 1717	J.C. Anjos <i>et al.</i>	(FNAL E691 Collab.)

OTHER RELATED PAPERS

SEMENOV	99	SPU 42 847	S.V. Semenov	
			Translated from UFN 42 937.	