

$\Delta(2390) \ 7/2^+$

$I(J^P) = \frac{3}{2}(\frac{7}{2}^+)$ Status: *

OMITTED FROM SUMMARY TABLE

$\Delta(2390)$ POLE POSITION

REAL PART

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2223± 15±19	¹ SVARC 14	L+P	$\pi N \rightarrow \pi N$
2350±100	CUTKOSKY 80	IPWA	$\pi N \rightarrow \pi N$

−2×IMAGINARY PART

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
431± 26±7	¹ SVARC 14	L+P	$\pi N \rightarrow \pi N$
260±100	CUTKOSKY 80	IPWA	$\pi N \rightarrow \pi N$

$\Delta(2390)$ ELASTIC POLE RESIDUE

MODULUS |r|

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
26±2±1	¹ SVARC 14	L+P	$\pi N \rightarrow \pi N$
12±6	CUTKOSKY 80	IPWA	$\pi N \rightarrow \pi N$

PHASE θ

VALUE (°)	DOCUMENT ID	TECN	COMMENT
− 160± 5±11	¹ SVARC 14	L+P	$\pi N \rightarrow \pi N$
− 90±60	CUTKOSKY 80	IPWA	$\pi N \rightarrow \pi N$

$\Delta(2390)$ BREIT-WIGNER MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2350±100	CUTKOSKY 80	IPWA	$\pi N \rightarrow \pi N$
2425± 60	HOEHLER 79	IPWA	$\pi N \rightarrow \pi N$

$\Delta(2390)$ BREIT-WIGNER WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
300±100	CUTKOSKY 80	IPWA	$\pi N \rightarrow \pi N$
300± 80	HOEHLER 79	IPWA	$\pi N \rightarrow \pi N$

$\Delta(2390)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \ N \pi$	3–12 %

$\Delta(2390)$ BRANCHING RATIOS

$\Gamma(N\pi)/\Gamma_{\text{total}}$				Γ_1/Γ
VALUE (%)	DOCUMENT ID	TECN	COMMENT	
8 ± 4	CUTKOSKY 80	IPWA	$\pi N \rightarrow \pi N$	
7 ± 4	HOEHLER 79	IPWA	$\pi N \rightarrow \pi N$	

$\Delta(2390)$ FOOTNOTES

¹ Fit to the amplitudes of HOEHLER 79.

$\Delta(2390)$ REFERENCES

SVARC	14	PR C89 045205	A. Svarc <i>et al.</i>	(RBI Zagreb, UNI Tuzla)
CUTKOSKY	80	Toronto Conf. 19	R.E. Cutkosky <i>et al.</i>	(CMU, LBL) IJP
Also		PR D20 2839	R.E. Cutkosky <i>et al.</i>	(CMU, LBL)
HOEHLER	79	PDAT 12-1	G. Hohler <i>et al.</i>	(KARLT) IJP
Also		Toronto Conf. 3	R. Koch	(KARLT) IJP