

$\Delta(2390) 7/2^+$ $I(J^P) = \frac{3}{2}(\frac{7}{2}^+)$ Status: *

OMITTED FROM SUMMARY TABLE

 $\Delta(2390)$ POLE POSITION**REAL PART**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$2223 \pm 15 \pm 19$	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
$431 \pm 26 \pm 7$	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
$26 \pm 2 \pm 1$	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
$-160 \pm 5 \pm 11$	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
<u>VALUE (%)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
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>	
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