

$\Delta(2390) 7/2^+$ $I(J^P) = \frac{3}{2}(\frac{7}{2}^+)$ 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 |
|--------------------------------------|-------------|------|---------------------------|-------------------|
| 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 |