

$\Delta(2300) \ 9/2^+$ $I(J^P) = \frac{3}{2}(\frac{9}{2}^+)$ Status: **

OMITTED FROM SUMMARY TABLE

 $\Delta(2300)$ POLE POSITION**REAL PART**

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|---------------|-------------|------|---------------------------|
| 2370 ± 80 | CUTKOSKY 80 | IPWA | $\pi N \rightarrow \pi N$ |

-2×IMAGINARY PART

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|---------------|-------------|------|---------------------------|
| 420 ± 160 | CUTKOSKY 80 | IPWA | $\pi N \rightarrow \pi N$ |

 $\Delta(2300)$ ELASTIC POLE RESIDUE**MODULUS $|r|$**

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|-------------|-------------|------|---------------------------|
| 10 ± 4 | CUTKOSKY 80 | IPWA | $\pi N \rightarrow \pi N$ |

PHASE θ

| VALUE (°) | DOCUMENT ID | TECN | COMMENT |
|--------------|-------------|------|---------------------------|
| -20 ± 30 | CUTKOSKY 80 | IPWA | $\pi N \rightarrow \pi N$ |

 $\Delta(2300)$ BREIT-WIGNER MASS

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|----------------|-------------|------|---------------------------|
| 2400 ± 125 | CUTKOSKY 80 | IPWA | $\pi N \rightarrow \pi N$ |
| 2217 ± 80 | HOEHLER 79 | IPWA | $\pi N \rightarrow \pi N$ |

 $\Delta(2300)$ BREIT-WIGNER WIDTH

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|---------------|-------------|------|---------------------------|
| 425 ± 150 | CUTKOSKY 80 | IPWA | $\pi N \rightarrow \pi N$ |
| 300 ± 100 | HOEHLER 79 | IPWA | $\pi N \rightarrow \pi N$ |

 $\Delta(2300)$ DECAY MODES

| Mode | Fraction (Γ_i/Γ) |
|-------------------|--------------------------------|
| $\Gamma_1 \ N\pi$ | 1-8 % |

 $\Delta(2300)$ BRANCHING RATIOS

| $\Gamma(N\pi)/\Gamma_{\text{total}}$ | DOCUMENT ID | TECN | COMMENT | Γ_1/Γ |
|--------------------------------------|-------------|------|---------------------------|-------------------|
| 6 ± 2 | CUTKOSKY 80 | IPWA | $\pi N \rightarrow \pi N$ | |
| 3 ± 2 | HOEHLER 79 | IPWA | $\pi N \rightarrow \pi N$ | |

$\Delta(2300)$ REFERENCES

| | | | | |
|----------|----|------------------|-----------------------------|----------------|
| 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 |
