

$\Delta(2300) 9/2^+$ $I(J^P) = \frac{3}{2}(\frac{9}{2}^+)$ 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)
$\Gamma_1 \quad N\pi$	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
