$\Delta(2300)\ 9/2^+$

$I(J^P) = \frac{3}{2}(\frac{9}{2}^+)$ Status: $\ast\ast$

OMITTED FROM SUMMARY TABLE

$\Delta(2300)$ POLE POSITION

REAL PART

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

$-2\times$IMAGINARY PART

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

$\Delta(2300)$ ELASTIC POLE RESIDUE

MODULUS $|r|$

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

PHASE θ

VALUE ($^\circ$)	DOCUMENT ID		TECN	COMMENT
-20 ± 30	CUTKOSKY	80	IPWA	$\pi N \to \pi N$

$\Delta(2300)$ BREIT-WIGNER MASS

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

$\Delta(2300)$ BREIT-WIGNER WIDTH

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

$\Delta(2300)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$N\pi$	1–8 %

$\Delta(2300)$ BRANCHING RATIOS

$\Gamma(N\pi)/\Gamma_{\text{total}}$ $\hspace{4cm}$ Γ_1/Γ

VALUE (%)	DOCUMENT ID		TECN	COMMENT
6 ± 2	CUTKOSKY	80	IPWA	$\pi N \to \pi N$
3 ± 2	HOEHLER	79	IPWA	$\pi N \to \pi N$

Δ(2300) REFERENCES

CUTKOSKY	80	Toronto Conf. 19	R.E. Cutkosky *et al.*	(CMU, LBL) IJP
Also		PR D20 2839	R.E. Cutkosky *et al.*	(CMU, LBL)
HOEHLER	79	PDAT 12-1	G. Hohler *et al.*	(KARLT) IJP
Also		Toronto Conf. 3	R. Koch	(KARLT) IJP