$\Delta(2200)\,7/2^-$

$I(J^P) = \frac{3}{2}(\frac{7}{2}^-)$ Status: $*$

OMITTED FROM SUMMARY TABLE

$\Delta(2200)$ POLE POSITION

REAL PART

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
2100 ± 50	CUTKOSKY	80	IPWA	$\pi N \to \pi N$

$-2\times$IMAGINARY PART

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
340 ± 80	CUTKOSKY	80	IPWA	$\pi N \to \pi N$

$\Delta(2200)$ ELASTIC POLE RESIDUE

MODULUS $|r|$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
8 ± 3	CUTKOSKY	80	IPWA	$\pi N \to \pi N$

PHASE θ

VALUE (°)	DOCUMENT ID		TECN	COMMENT
-70 ± 40	CUTKOSKY	80	IPWA	$\pi N \to \pi N$

$\Delta(2200)$ BREIT-WIGNER MASS

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
2200 ± 80	CUTKOSKY	80	IPWA	$\pi N \to \pi N$
2215 ± 60	HOEHLER	79	IPWA	$\pi N \to \pi N$

$\Delta(2200)$ BREIT-WIGNER WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
450 ± 100	CUTKOSKY	80	IPWA	$\pi N \to \pi N$
400 ± 100	HOEHLER	79	IPWA	$\pi N \to \pi N$

$\Delta(2200)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$N\pi$	3–8 %

$\Delta(2200)$ BRANCHING RATIOS

$\Gamma(N\pi)/\Gamma_{\text{total}}$ $\hfill$ Γ_1/Γ

VALUE (%)	DOCUMENT ID		TECN	COMMENT
6 ± 2	CUTKOSKY	80	IPWA	$\pi N \to \pi N$
5 ± 2	HOEHLER	79	IPWA	$\pi N \to \pi N$

$\Delta(2200)$ PHOTON DECAY AMPLITUDES AT THE POLE

$\Delta(2200) \rightarrow N\gamma$, helicity-1/2 amplitude $A_{1/2}$

MODULUS (GeV$^{-1/2}$)	PHASE (°)	DOCUMENT ID		TECN
$0.107^{+0.011}_{-0.020}$	-36 ± 5	ROENCHEN	14	DPWA

$\Delta(2200) \rightarrow N\gamma$, helicity-3/2 amplitude $A_{3/2}$

MODULUS (GeV$^{-1/2}$)	PHASE (°)	DOCUMENT ID		TECN
$-0.131^{+0.024}_{-0.009}$	113^{+9}_{-5}	ROENCHEN	14	DPWA

$\Delta(2200)$ REFERENCES

ROENCHEN	14	EPJ A50 101	D. Roenchen *et al.*	
Also		EPJ A51 63 (errat.)	D. Roenchen *et al.*	
CUTKOSKY	80	Toronto Conf. 19	R.E. Cutkosky *et al.*	(CMU, LBL) IJP
Also		PR D20 2839	R.E. Cutkosky *et al.*	(CMU, LBL) IJP
HOEHLER	79	PDAT 12-1	G. Hohler *et al.*	(KARLT) IJP
Also		Toronto Conf. 3	R. Koch	(KARLT) IJP