

$\Delta(2390) F_{37}$

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

OMITTED FROM SUMMARY TABLE

$\Delta(2390)$ BREIT-WIGNER MASS			
VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
≈ 2390 OUR ESTIMATE			
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 $\pi N \rightarrow \pi N$

$\Delta(2390)$ POLE POSITION			
REAL PART			
VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2350 ± 100	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
$-2\times$ IMAGINARY PART			
VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
260 ± 100	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

$\Delta(2390)$ ELASTIC POLE RESIDUE			
MODULUS $ r $			
VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
12 ± 6	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
PHASE θ			
VALUE ($^\circ$)	DOCUMENT ID	TECN	COMMENT
-90 ± 60	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

$\Delta(2390)$ DECAY MODES	
Mode	
Γ_1	$N\pi$
Γ_2	ΣK

$\Delta(2390)$ BRANCHING RATIOS			
$\Gamma(N\pi)/\Gamma_{\text{total}}$			Γ_1/Γ
VALUE	DOCUMENT ID	TECN	COMMENT
0.08 ± 0.04	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
0.07 ± 0.04	HOEHLER	79	IPWA $\pi N \rightarrow \pi N$

$(\Gamma_i \Gamma_f)^{1/2} / \Gamma_{\text{total}}$ in $N\pi \rightarrow \Delta(2390) \rightarrow \Sigma K$	$(\Gamma_1 \Gamma_2)^{1/2} / \Gamma$		
VALUE	DOCUMENT ID	TECN	COMMENT
<0.015	CANDLIN	84	DPWA $\pi^+ p \rightarrow \Sigma^+ K^+$

$\Delta(2390)$ REFERENCES

CANDLIN	84	NP B238 477	D.J. Candlin <i>et al.</i>	(EDIN, RAL, LOWC)
CUTKOSKY	80	Toronto Conf. 19	R.E. Cutkosky <i>et al.</i>	(CMU, LBL) IJP
Also	79	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	80	Toronto Conf. 3	R. Koch	(KARLT) IJP