

$\Delta(2400) G_{39}$ $I(J^P) = \frac{3}{2}(\frac{9}{2}^-)$ Status: **

OMITTED FROM SUMMARY TABLE

 $\Delta(2400)$ BREIT-WIGNER MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
≈ 2400 OUR ESTIMATE			
2300 ± 100	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
2468 ± 50	HOEHLER	79	IPWA $\pi N \rightarrow \pi N$
2200 ± 100	HENDRY	78	MPWA $\pi N \rightarrow \pi N$

 $\Delta(2400)$ BREIT-WIGNER WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
330 ± 100	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
480 ± 100	HOEHLER	79	IPWA $\pi N \rightarrow \pi N$
450 ± 200	HENDRY	78	MPWA $\pi N \rightarrow \pi N$

 $\Delta(2400)$ POLE POSITION

REAL PART

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2260 ± 60	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

-2xIMAGINARY PART

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
320 ± 160	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

 $\Delta(2400)$ ELASTIC POLE RESIDUEMODULUS $|r|$

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
8 ± 4	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

PHASE θ

VALUE ($^\circ$)	DOCUMENT ID	TECN	COMMENT
-25 ± 15	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

 $\Delta(2400)$ DECAY MODES

Mode
$\Gamma_1 \quad N\pi$
$\Gamma_2 \quad \Sigma K$

$\Delta(2400)$ BRANCHING RATIOS

$\Gamma(N\pi)/\Gamma_{\text{total}}$	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	Γ_1/Γ
0.05±0.02	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$	
0.06±0.03	HOEHLER	79	IPWA $\pi N \rightarrow \pi N$	
0.10±0.03	HENDRY	78	MPWA $\pi N \rightarrow \pi N$	

$(\Gamma_i\Gamma_f)^{1/2}/\Gamma_{\text{total}}$ in $N\pi \rightarrow \Delta(2400) \rightarrow \Sigma K$	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	$(\Gamma_1\Gamma_2)^{1/2}/\Gamma$
<0.015	CANDLIN	84	DPWA $\pi^+ p \rightarrow \Sigma^+ K^+$	

$\Delta(2400)$ 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
HENDRY	78	PRL 41 222	A.W. Hendry	(IND, LBL) IJP
Also	81	ANP 136 1	A.W. Hendry	(IND)