

$\Delta(2390) F_{37}$ 

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

OMITTED FROM SUMMARY TABLE

 **$\Delta(2390)$  BREIT-WIGNER MASS**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b><math>\approx 2390</math> OUR ESTIMATE</b>			
$2350 \pm 100$	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
$2425 \pm 60$	HOEHLER	79	IPWA $\pi N \rightarrow \pi N$

 **$\Delta(2390)$  BREIT-WIGNER WIDTH**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$300 \pm 100$	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
$300 \pm 80$	HOEHLER	79	IPWA $\pi N \rightarrow \pi N$

 **$\Delta(2390)$  POLE POSITION****REAL PART**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$2350 \pm 100$	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

**- 2xIMAGINARY PART**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$260 \pm 100$	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

 **$\Delta(2390)$  ELASTIC POLE RESIDUE****MODULUS  $|r|$** 

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$12 \pm 6$	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

**PHASE  $\theta$** 

<u>VALUE (<math>^\circ</math>)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$-90 \pm 60$	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$

 **$\Delta(2390)$  DECAY MODES**

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

 **$\Delta(2390)$  BRANCHING RATIOS**

$\Gamma(N\pi)/\Gamma_{\text{total}}$	$\Gamma_1/\Gamma$		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$0.08 \pm 0.04$	CUTKOSKY	80	IPWA $\pi N \rightarrow \pi N$
$0.07 \pm 0.04$	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