

Δ(2350) D₃₅

$$I(J^P) = \frac{3}{2}(\frac{5}{2}^-) \text{ Status: } *$$

OMITTED FROM SUMMARY TABLE

Δ(2350) BREIT-WIGNER MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
≈ 2350 OUR ESTIMATE			
2171 ± 18	MANLEY	92 IPWA	π N → π N & N π π
2400 ± 125	CUTKOSKY	80 IPWA	π N → π N
2305 ± 26	HOEHLER	79 IPWA	π N → π N

Δ(2350) BREIT-WIGNER WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
264 ± 51	MANLEY	92 IPWA	π N → π N & N π π
400 ± 150	CUTKOSKY	80 IPWA	π N → π N
300 ± 70	HOEHLER	79 IPWA	π N → π N

Δ(2350) POLE POSITION

REAL PART

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
2400 ± 125	CUTKOSKY	80 IPWA	π N → π N

− 2×IMAGINARY PART

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
400 ± 150	CUTKOSKY	80 IPWA	π N → π N

Δ(2350) ELASTIC POLE RESIDUE

MODULUS |r|

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
15 ± 8	CUTKOSKY	80 IPWA	π N → π N

PHASE θ

<u>VALUE (°)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
− 70 ± 70	CUTKOSKY	80 IPWA	π N → π N

Δ(2350) DECAY MODES

Mode
Γ ₁ N π
Γ ₂ Σ K

$\Delta(2350)$ BRANCHING RATIOS

$\Gamma(N\pi)/\Gamma_{\text{total}}$	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>	Γ_1/Γ
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
0.020 ± 0.003	MANLEY	92	IPWA	$\pi N \rightarrow \pi N \text{ \& } N\pi\pi$
0.20 ± 0.10	CUTKOSKY	80	IPWA	$\pi N \rightarrow \pi N$
0.04 ± 0.02	HOEHLER	79	IPWA	$\pi N \rightarrow \pi N$

$(\Gamma_i\Gamma_f)^{1/2}/\Gamma_{\text{total}}$ in $N\pi \rightarrow \Delta(2350) \rightarrow \Sigma K$	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>	$(\Gamma_1\Gamma_2)^{1/2}/\Gamma$
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<0.015	CANDLIN	84	DPWA	$\pi^+ p \rightarrow \Sigma^+ K^+$

$\Delta(2350)$ REFERENCES

MANLEY	92	PR D45 4002	+Saleski	(KENT) IJP
Also	84	PR D30 904	Manley, Arndt, Goradia, Teplitz	(VPI)
CANDLIN	84	NP B238 477	+Lowe, Peach, Scotland+	(EDIN, RAL, LOWC)
CUTKOSKY	80	Toronto Conf. 19	+Forsyth, Babcock, Kelly, Hendrick	(CMU, LBL) IJP
Also	79	PR D20 2839	Cutkosky, Forsyth, Hendrick, Kelly	(CMU, LBL)
HOEHLER	79	PDAT 12-1	+Kaiser, Koch, Pietarinen	(KARLT) IJP
Also	80	Toronto Conf. 3	Koch	(KARLT) IJP