

**$N(1880) 1/2^+$**  $I(J^P) = \frac{1}{2}(\frac{1}{2}^+)$  Status: \*\*

OMITTED FROM SUMMARY TABLE

 **$N(1880)$  BREIT-WIGNER MASS**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
1870 ± 35	ANISOVICH 12A	DPWA	Multichannel
1885 ± 30	MANLEY 92	IPWA	$\pi N \rightarrow \pi N$ & $N\pi\pi$

 **$N(1880)$  BREIT-WIGNER WIDTH**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
235 ± 65	ANISOVICH 12A	DPWA	Multichannel
113 ± 44	MANLEY 92	IPWA	$\pi N \rightarrow \pi N$ & $N\pi\pi$

 **$N(1880)$  POLE POSITION****REAL PART**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
1860 ± 35	ANISOVICH 12A	DPWA	Multichannel

**-2×IMAGINARY PART**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
250 ± 70	ANISOVICH 12A	DPWA	Multichannel

 **$N(1880)$  ELASTIC POLE RESIDUE****MODULUS  $|r|$** 

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
6 ± 4	ANISOVICH 12A	DPWA	Multichannel

**PHASE  $\theta$** 

<u>VALUE (°)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
80 ± 65	ANISOVICH 12A	DPWA	Multichannel

 **$N(1880)$  INELASTIC POLE RESIDUE**The "normalized residue" is the residue divided by  $\Gamma_{pole}$ .**Normalized residue in  $N\pi \rightarrow N(1880) \rightarrow N\eta$** 

<u>MODULUS (%)</u>	<u>PHASE (°)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
11 ± 7	-75 ± 55	ANISOVICH 12A	DPWA	Multichannel

**Normalized residue in  $N\pi \rightarrow N(1880) \rightarrow \Lambda K$** 

<u>MODULUS (%)</u>	<u>PHASE (°)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
3 ± 2	40 ± 40	ANISOVICH 12A	DPWA	Multichannel

**Normalized residue in  $N\pi \rightarrow N(1880) \rightarrow \Sigma K$** 

<u>MODULUS (%)</u>	<u>PHASE (°)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
11 ± 6	95 ± 40	ANISOVICH	12A DPWA	Multichannel

**Normalized residue in  $N\pi \rightarrow N(1880) \rightarrow \Delta\pi, P\text{-wave}$** 

<u>MODULUS (%)</u>	<u>PHASE (°)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
20 ± 8	-150 ± 50	ANISOVICH	12A DPWA	Multichannel

 **$N(1880)$  DECAY MODES**

Mode	
$\Gamma_1$	$N\pi$
$\Gamma_2$	$N\eta$
$\Gamma_3$	$\Lambda K$
$\Gamma_4$	$\Sigma K$
$\Gamma_5$	$\Delta(1232)\pi$

 **$N(1880)$  BRANCHING RATIOS**

<b><math>\Gamma(N\pi)/\Gamma_{\text{total}}</math></b>	<b><math>\Gamma_1/\Gamma</math></b>
<u>VALUE (%)</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
5 ± 3	ANISOVICH 12A DPWA Multichannel
15 ± 6	MANLEY 92 IPWA $\pi N \rightarrow \pi N \& N\pi\pi$

<b><math>\Gamma(N\eta)/\Gamma_{\text{total}}</math></b>	<b><math>\Gamma_2/\Gamma</math></b>
<u>VALUE (%)</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
25 <sup>+30</sup> <sub>-20</sub>	ANISOVICH 12A DPWA Multichannel
-19 ± 8	MANLEY 92 IPWA $\pi N \rightarrow \pi N \& N\pi\pi$

<b><math>\Gamma(\Lambda K)/\Gamma_{\text{total}}</math></b>	<b><math>\Gamma_3/\Gamma</math></b>
<u>VALUE (%)</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
2 ± 1	ANISOVICH 12A DPWA Multichannel

<b><math>\Gamma(\Sigma K)/\Gamma_{\text{total}}</math></b>	<b><math>\Gamma_4/\Gamma</math></b>
<u>VALUE (%)</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
17 ± 7	ANISOVICH 12A DPWA Multichannel

<b><math>\Gamma(\Delta(1232)\pi)/\Gamma_{\text{total}}</math></b>	<b><math>\Gamma_5/\Gamma</math></b>
<u>VALUE (%)</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
29 ± 12	ANISOVICH 12A DPWA Multichannel

 **$N(1880)$  PHOTON DECAY AMPLITUDES** **$N(1880) \rightarrow p\gamma$ , helicity-1/2 amplitude  $A_{1/2}$** 

<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
0.014 ± 0.003	<sup>1</sup> ANISOVICH 12A DPWA Phase = (-130 ± 60)°

## ***N*(1880) FOOTNOTES**

<sup>1</sup>This ANISOVICH 12A value is the complex helicity amplitude at the pole position. |

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## ***N*(1880) REFERENCES**

ANISOVICH	12A	EPJ A48 15	A.V. Anisovich <i>et al.</i>	(BONN, PNPI)
MANLEY	92	PR D45 4002	D.M. Manley, E.M. Saleski	(KENT)
Also		PR D30 904	D.M. Manley <i>et al.</i>	(VPI)

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