

$N(1900) P_{13}$

$$I(J^P) = \frac{1}{2}(\frac{3}{2}^+) \text{ Status: } **$$

OMITTED FROM SUMMARY TABLE

 $N(1900)$ BREIT-WIGNER MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
≈ 1900 OUR ESTIMATE			
1879 ± 17	MANLEY	92	IPWA $\pi N \rightarrow \pi N$ & $N\pi\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1951 ± 53	PENNER	02C	DPWA Multichannel

 $N(1900)$ BREIT-WIGNER WIDTH

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
498 ± 78	MANLEY	92	IPWA $\pi N \rightarrow \pi N$ & $N\pi\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
622 ± 42	PENNER	02C	DPWA Multichannel

 $N(1900)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $N\pi$	
Γ_2 $N\pi\pi$	
Γ_3 $N\rho, S=1/2, P\text{-wave}$	
Γ_4 $N\eta$	(14 \pm 5) %
Γ_5 $N\omega$	(39 \pm 9) %
Γ_6 ΛK	(2.40 \pm 0.30) %
Γ_7 ΣK	

 $N(1900)$ BRANCHING RATIOS

$\Gamma(N\pi)/\Gamma_{\text{total}}$	Γ_1/Γ
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
0.26 ± 0.06	MANLEY 92 IPWA $\pi N \rightarrow \pi N$ & $N\pi\pi$
• • • We do not use the following data for averages, fits, limits, etc. • • •	
0.16 ± 0.02	PENNER 02C DPWA Multichannel
$\Gamma(N\eta)/\Gamma_{\text{total}}$	Γ_4/Γ
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
0.14 ± 0.05	PENNER 02C DPWA Multichannel
$\Gamma(N\omega)/\Gamma_{\text{total}}$	Γ_5/Γ
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
0.39 ± 0.09	PENNER 02C DPWA Multichannel

$(\Gamma_i \Gamma_f)^{1/2} / \Gamma_{\text{total}}$ in $N\pi \rightarrow N(1900) \rightarrow N\rho, S=1/2, P\text{-wave}$	$(\Gamma_1 \Gamma_3)^{1/2} / \Gamma$		
VALUE	DOCUMENT ID	TECN	COMMENT
-0.34 ± 0.03	MANLEY	92	IPWA $\pi N \rightarrow \pi N$ & $N\pi\pi$

$\Gamma(\Lambda K) / \Gamma_{\text{total}}$	Γ_6 / Γ		
VALUE	DOCUMENT ID	TECN	COMMENT
0.024 ± 0.003	SHKLYAR	05	DPWA Multichannel
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.001 ± 0.001	PENNER	02C	DPWA Multichannel

$\Gamma(\Sigma K) / \Gamma_{\text{total}}$	Γ_7 / Γ		
VALUE	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.01 ± 0.01	PENNER	02C	DPWA Multichannel

$N(1900)$ PHOTON DECAY AMPLITUDES

$N(1900) \rightarrow \rho\gamma$, helicity-1/2 amplitude $A_{1/2}$

VALUE ($\text{GeV}^{-1/2}$)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
-0.017	PENNER	02D	DPWA Multichannel

$N(1900) \rightarrow \rho\gamma$, helicity-3/2 amplitude $A_{3/2}$

VALUE ($\text{GeV}^{-1/2}$)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
0.031	PENNER	02D	DPWA Multichannel

$N(1900) \rightarrow n\gamma$, helicity-1/2 amplitude $A_{1/2}$

VALUE ($\text{GeV}^{-1/2}$)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
-0.016	PENNER	02D	DPWA Multichannel

$N(1900) \rightarrow n\gamma$, helicity-3/2 amplitude $A_{3/2}$

VALUE ($\text{GeV}^{-1/2}$)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
-0.002	PENNER	02D	DPWA Multichannel

$N(1900)$ REFERENCES

SHKLYAR	05	PR C72 015210	V. Shklyar, H. Lenske, U. Mosel	(GIES)
PENNER	02C	PR C66 055211	G. Penner, U. Mosel	(GIES)
PENNER	02D	PR C66 055212	G. Penner, U. Mosel	(GIES)
MANLEY	92	PR D45 4002	D.M. Manley, E.M. Saleski	(KENT)
Also		PR D30 904	D.M. Manley <i>et al.</i>	(VPI)