# $N(1900)\ 3/2^+$

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

## *N*(1900) POLE POSITION

### REAL PART

| *VALUE* (MeV) | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|
| **1900 to 1940 (≈ 1920) OUR ESTIMATE** | | | | |
| 1925±25 | SARANTSEV | 25 | DPWA | Multichannel |
| 1905± 2 | ROENCHEN | 22 | DPWA | Multichannel |
| 1928±18±2 | [1] SVARC | 14 | L+P | $\pi N \to \pi N$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 1856 | HUNT | 19 | DPWA | Multichannel |
| 1912±30 | [2] ANISOVICH | 17A | L+P | $\gamma p, \pi^- p \to K\Lambda$ |
| 1910±30 | SOKHOYAN | 15A | DPWA | Multichannel |
| 1910±30 | GUTZ | 14 | DPWA | Multichannel |
| 1910 | SHKLYAR | 13 | DPWA | Multichannel |

[1] Fit to the amplitudes of HOEHLER 79.
[2] Statistical error only.

### −2×IMAGINARY PART

| *VALUE* (MeV) | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|
| **90 to 160 (≈ 130) OUR ESTIMATE** | | | | |
| 270±30 | SARANTSEV | 25 | DPWA | Multichannel |
| 93± 2 | ROENCHEN | 22 | DPWA | Multichannel |
| 152±40±9 | [1] SVARC | 14 | L+P | $\pi N \to \pi N$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 241 | HUNT | 19 | DPWA | Multichannel |
| 166±30 | [2] ANISOVICH | 17A | L+P | $\gamma p, \pi^- p \to K\Lambda$ |
| 280±50 | SOKHOYAN | 15A | DPWA | Multichannel |
| 280±50 | GUTZ | 14 | DPWA | Multichannel |
| 173 | SHKLYAR | 13 | DPWA | Multichannel |

[1] Fit to the amplitudes of HOEHLER 79.
[2] Statistical error only.

## *N*(1900) ELASTIC POLE RESIDUE

### MODULUS $|r|$

| *VALUE* (MeV) | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|
| **2 to 6 (≈ 4) OUR ESTIMATE** | | | | |
| 1.6±0.2 | ROENCHEN | 22 | DPWA | Multichannel |
| 4 ±2 | SOKHOYAN | 15A | DPWA | Multichannel |
| 4 ±1 ±1 | [1] SVARC | 14 | L+P | $\pi N \to \pi N$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 4 ±2 | GUTZ | 14 | DPWA | Multichannel |
| 10 | SHKLYAR | 13 | DPWA | Multichannel |
| 3 ±2 | ANISOVICH | 12A | DPWA | Multichannel |

[1] Fit to the amplitudes of HOEHLER 79.

### PHASE $\theta$

| VALUE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **−40 to 20 (≈ − 10) OUR ESTIMATE** | | | | |
| 44±11 | ROENCHEN | 22 | DPWA | Multichannel |
| −10±40 | SOKHOYAN | 15A | DPWA | Multichannel |
| −29±15±2 | [1] SVARC | 14 | L+P | $\pi N \to \pi N$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| −10±40 | GUTZ | 14 | DPWA | Multichannel |
| −64 | SHKLYAR | 13 | DPWA | Multichannel |
| 10±35 | ANISOVICH | 12A | DPWA | Multichannel |

[1] Fit to the amplitudes of HOEHLER 79.

## $N(1900)$ INELASTIC POLE RESIDUE

The "normalized residue" is the residue divided by $\Gamma_{pole}/2$.

### Normalized residue in $N\pi \to N(1900) \to N\eta$

| MODULUS | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| 0.010±0.002 | 55 ± 15 | ROENCHEN | 22 | DPWA | Multichannel |
| 0.05 ±0.02 | 70 ± 60 | ANISOVICH | 12A | DPWA | Multichannel |

### Normalized residue in $N\pi \to N(1900) \to \Lambda K$

| MODULUS | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| 0.029±0.003 | 5.4 ± 9.3 | ROENCHEN | 22 | DPWA | Multichannel |
| 0.03 ±0.02 | 90 ± 40 | ANISOVICH | 17A | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| 0.07 ±0.03 | 135 ± 25 | ANISOVICH | 12A | DPWA | Multichannel |

### Normalized residue in $N\pi \to N(1900) \to \Sigma K$

| MODULUS | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| 0.013±0.002 | −40 ± 9 | ROENCHEN | 22 | DPWA | Multichannel |
| 0.04 ±0.02 | 110 ± 30 | ANISOVICH | 12A | DPWA | Multichannel |

### Normalized residue in $N\pi \to N(1900) \to N(1535)\pi$

| MODULUS | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| 0.04±0.01 | 170 ± 30 | GUTZ | 14 | DPWA | Multichannel |

### Normalized residue in $N\pi \to N(1900) \to \Delta(1232)\pi$, $P$-wave

| MODULUS | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| 0.07±0.04 | −65 ± 30 | SOKHOYAN | 15A | DPWA | Multichannel |

### Normalized residue in $N\pi \to N(1900) \to \Delta(1232)\pi$, $F$-wave

| MODULUS | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| 0.10±0.05 | 80 ± 30 | SOKHOYAN | 15A | DPWA | Multichannel |

### Normalized residue in $N\pi \to N(1900) \to N(1520)\pi$

| MODULUS | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| 0.07±0.04 | −105 ± 35 | SOKHOYAN | 15A | DPWA | Multichannel |

### Normalized residue in $N\pi \to N(1900) \to N\sigma$

| *MODULUS* | *PHASE (°)* | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|---|
| 0.03±0.02 | −110 ± 35 | SOKHOYAN | 15A | DPWA | Multichannel |

## $N(1900)$ BREIT-WIGNER MASS

| *VALUE* (MeV) | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|
| **1890 to 1950 (≈ 1920) OUR ESTIMATE** | | | | |
| 1930±15 | SARANTSEV | 25 | DPWA | Multichannel |
| 1911± 6 | [1] HUNT | 19 | DPWA | Multichannel |
| 1998± 3 | [1] SHKLYAR | 13 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 1910±30 | SOKHOYAN | 15A | DPWA | Multichannel |
| 1910±30 | GUTZ | 14 | DPWA | Multichannel |
| 1900± 8 | [1] SHRESTHA | 12A | DPWA | Multichannel |
| 1951±53 | PENNER | 02C | DPWA | Multichannel |

[1] Statistical error only.

## $N(1900)$ BREIT-WIGNER WIDTH

| *VALUE* (MeV) | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|
| **100 to 320 (≈ 200) OUR ESTIMATE** | | | | |
| 270±20 | SARANTSEV | 25 | DPWA | Multichannel |
| 292±16 | [1] HUNT | 19 | DPWA | Multichannel |
| 359±10 | [1] SHKLYAR | 13 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 270±50 | SOKHOYAN | 15A | DPWA | Multichannel |
| 270±50 | GUTZ | 14 | DPWA | Multichannel |
| 101±15 | [1] SHRESTHA | 12A | DPWA | Multichannel |
| 622±42 | PENNER | 02C | DPWA | Multichannel |

[1] Statistical error only.

## $N(1900)$ DECAY MODES

| | Mode | Fraction ($\Gamma_i/\Gamma$) |
|---|---|---|
| $\Gamma_1$ | $N\pi$ | 1–20 % |
| $\Gamma_2$ | $N\eta$ | 2–14 % |
| $\Gamma_3$ | $N\eta'$ | 4–8 % |
| $\Gamma_4$ | $N\omega$ | 7–13 % |
| $\Gamma_5$ | $\Lambda K$ | 2–20 % |
| $\Gamma_6$ | $\Sigma K$ | 3–7 % |
| $\Gamma_7$ | $N\pi\pi$ | >56 % |
| $\Gamma_8$ | $\Delta(1232)\pi$ | 30–70 % |
| $\Gamma_9$ | $\Delta(1232)\pi$, $P$-wave | 9–25 % |
| $\Gamma_{10}$ | $\Delta(1232)\pi$, $F$-wave | 21–45 % |
| $\Gamma_{11}$ | $N\rho$ | (46 ±13 ) % |
| $\Gamma_{12}$ | $N\rho$, $S$=1/2 | 25–40 % |

| | | |
|---|---|---|
| $\Gamma_{13}$ | $N\rho$, $S$=3/2 , $P$-wave | ( 9.0± 3.0) % |
| $\Gamma_{14}$ | $N\rho$, $S$=3/2 , $F$-wave | (30 ±12 ) % |
| $\Gamma_{15}$ | $N\sigma$ | 1–7 % |
| $\Gamma_{16}$ | $N(1440)\pi$ | ( 9 ± 6 ) % |
| $\Gamma_{17}$ | $N(1520)\pi$, $S$-wave | 7–23 % |
| $\Gamma_{18}$ | $N(1535)\pi$ | 4–10 % |
| $\Gamma_{19}$ | $\Lambda K^*(892)$ | < 0.2 % |
| $\Gamma_{20}$ | $p\gamma$ | 0.001–0.025 % |
| $\Gamma_{21}$ | $p\gamma$, helicity=1/2 | 0.001–0.021 % |
| $\Gamma_{22}$ | $p\gamma$, helicity=3/2 | <0.003 % |
| $\Gamma_{23}$ | $n\gamma$ | <0.040 % |
| $\Gamma_{24}$ | $n\gamma$, helicity=1/2 | <0.007 % |
| $\Gamma_{25}$ | $n\gamma$, helicity=3/2 | <0.033 % |

## $N(1900)$ BRANCHING RATIOS

### $\Gamma(N\pi)/\Gamma_{\text{total}}$ $\Gamma_1/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **1–20 % OUR ESTIMATE** | | | | |
| 4 ±3 | SEIFEN | 25 | DPWA | Multichannel |
| 1.9±0.1 | [1] HUNT | 19 | DPWA | Multichannel |
| 25 ±1 | [1] SHKLYAR | 13 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 3 ±2 | SOKHOYAN | 15A | DPWA | Multichannel |
| 3 ±2 | GUTZ | 14 | DPWA | Multichannel |
| 7 ±4 | [1] SHRESTHA | 12A | DPWA | Multichannel |
| 16 ±2 | PENNER | 02C | DPWA | Multichannel |

[1] Statistical error only.

### $\Gamma(N\eta)/\Gamma_{\text{total}}$ $\Gamma_2/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 2 ±2 | MUELLER | 20 | DPWA | Multichannel |
| 1.3±0.5 | [1] HUNT | 19 | DPWA | Multichannel |
| 2 ±2 | [1] SHKLYAR | 13 | DPWA | Multichannel |
| 10 ±4 | ANISOVICH | 12A | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| < 1 | [1] SHRESTHA | 12A | DPWA | Multichannel |
| 14 ±5 | PENNER | 02C | DPWA | Multichannel |

[1] Statistical error only.

### $\Gamma(N\eta')/\Gamma_{\text{total}}$ $\Gamma_3/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **4–8 % OUR ESTIMATE** | | | | |
| 6±2 | ANISOVICH | 17C | DPWA | Multichannel |

### $\Gamma(N\omega)/\Gamma_{\text{total}}$ $\Gamma_4/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 15±8 | DENISENKO | 16 | DPWA | Multichannel |
| 10±3 | [1] SHKLYAR | 13 | DPWA | Multichannel |

• • • We do not use the following data for averages, fits, limits, etc. • • •

| | | | | |
|---|---|---|---|---|
| 39±9 | PENNER | 02C | DPWA | Multichannel |

[1] Statistical error only.

## $\Gamma(\Lambda K)/\Gamma_{\text{total}}$ $\Gamma_5/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 13.7±0.3 | [1] HUNT | 19 | DPWA | Multichannel |
| 16 ±5 | ANISOVICH | 12A | DPWA | Multichannel |
| 2.4±0.3 | [1] SHKLYAR | 05 | DPWA | Multichannel |

• • • We do not use the following data for averages, fits, limits, etc. • • •

| | | | | |
|---|---|---|---|---|
| 14 ±5 | [1] SHRESTHA | 12A | DPWA | Multichannel |
| 5 to 15 | NIKONOV | 08 | DPWA | Multichannel |
| 0.1±0.1 | PENNER | 02C | DPWA | Multichannel |

[1] Statistical error only.

## $\Gamma(\Sigma K)/\Gamma_{\text{total}}$ $\Gamma_6/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 5±2 | ANISOVICH | 12A | DPWA | Multichannel |

• • • We do not use the following data for averages, fits, limits, etc. • • •

| | | | | |
|---|---|---|---|---|
| 1±1 | PENNER | 02C | DPWA | Multichannel |

## $\Gamma(\Delta(1232)\pi)/\Gamma_{\text{total}}$ $\Gamma_8/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **13±5** | SARANTSEV | 25 | DPWA | Multichannel |

## $\Gamma(\Delta(1232)\pi, P\text{-wave})/\Gamma_{\text{total}}$ $\Gamma_9/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 8±4 | SARANTSEV | 25 | DPWA | Multichannel |
| 9±6 | SEIFEN | 25 | DPWA | Multichannel |

• • • We do not use the following data for averages, fits, limits, etc. • • •

| | | | | |
|---|---|---|---|---|
| 17±8 | SOKHOYAN | 15A | DPWA | Multichannel |

## $\Gamma(\Delta(1232)\pi, F\text{-wave})/\Gamma_{\text{total}}$ $\Gamma_{10}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 5± 3 | SARANTSEV | 25 | DPWA | Multichannel |
| 4± 3 | SEIFEN | 25 | DPWA | Multichannel |

• • • We do not use the following data for averages, fits, limits, etc. • • •

| | | | | |
|---|---|---|---|---|
| 33±12 | SOKHOYAN | 15A | DPWA | Multichannel |

## $\Gamma(N\rho)/\Gamma_{\text{total}}$ $\Gamma_{11}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **46±13** | SARANTSEV | 25 | DPWA | Multichannel |

## $\Gamma(N\rho, S{=}1/2)/\Gamma_{\text{total}}$ $\Gamma_{12}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **25–40 % OUR ESTIMATE** | | | | |
| 7±4 | SARANTSEV | 25 | DPWA | Multichannel |
| 32±7 | [1] HUNT | 19 | DPWA | Multichannel |

[1] Statistical error only.

### $\Gamma(N\rho, S{=}3/2, P\text{-wave})/\Gamma_{total}$ $\Gamma_{13}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **9±3** | SARANTSEV | 25 | DPWA | Multichannel |

### $\Gamma(N\rho, S{=}3/2, F\text{-wave})/\Gamma_{total}$ $\Gamma_{14}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **30±12** | SARANTSEV | 25 | DPWA | Multichannel |

### $\Gamma(N\sigma)/\Gamma_{total}$ $\Gamma_{15}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 10±3 | SARANTSEV | 25 | DPWA | Multichannel |
| 9±4 | SEIFEN | 25 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| 4±3 | SOKHOYAN | 15A | DPWA | Multichannel |

### $\Gamma(N(1440)\pi)/\Gamma_{total}$ $\Gamma_{16}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **9±6** | SEIFEN | 25 | DPWA | Multichannel |

### $\Gamma(N(1520)\pi, S\text{-wave})/\Gamma_{total}$ $\Gamma_{17}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| < 2 | SEIFEN | 25 | DPWA | Multichannel |
| 15±8 | SOKHOYAN | 15A | DPWA | Multichannel |

### $\Gamma(N(1535)\pi)/\Gamma_{total}$ $\Gamma_{18}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| 15±6 | SEIFEN | 25 | DPWA | Multichannel |
| 7±3 | GUTZ | 14 | DPWA | Multichannel |

### $\Gamma(\Lambda K^*(892))/\Gamma_{total}$ $\Gamma_{19}/\Gamma$

| VALUE (%) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| **< 0.2 % OUR ESTIMATE** | | | | |
| <0.2 | ANISOVICH | 17B | DPWA | Multichannel |

## *N*(1900) PHOTON DECAY AMPLITUDES AT THE POLE

### $N(1900) \to p\gamma$, helicity-1/2 amplitude $A_{1/2}$

| MODULUS ($GeV^{-1/2}$) | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| −0.050 ±0.012 | 40 ± 40 | SARANTSEV | 25 | DPWA | Multichannel |
| 0.0091±0.0014 | 80 ± 12 | ROENCHEN | 22 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| 0.026 ±0.014 | 60 ± 35 | SOKHOYAN | 15A | DPWA | Multichannel |

### $N(1900) \to p\gamma$, helicity-3/2 amplitude $A_{3/2}$

| MODULUS ($GeV^{-1/2}$) | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| −0.044 ±0.012 | 35 ± 20 | SARANTSEV | 25 | DPWA | Multichannel |
| −0.0077±0.0017 | −42 ± 12 | ROENCHEN | 22 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| −0.070 ±0.030 | 70 ± 50 | SOKHOYAN | 15A | DPWA | Multichannel |

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

| MODULUS ($GeV^{-1/2}$) | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| $-0.098 \pm 0.020$ | $-13 \pm 20$ | ANISOVICH | 17E | DPWA | Multichannel |

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

| MODULUS ($GeV^{-1/2}$) | PHASE (°) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|---|
| $0.074 \pm 0.015$ | $5 \pm 15$ | ANISOVICH | 17E | DPWA | Multichannel |

## N(1900) BREIT-WIGNER PHOTON DECAY AMPLITUDES

### $N(1900) \to p\gamma$, helicity-1/2 amplitude $A_{1/2}$

| VALUE ($GeV^{-1/2}$) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| $-0.050 \pm 0.012$ | SARANTSEV | 25 | DPWA | Multichannel |
| $0.040 \pm 0.004$ | [1] HUNT | 19 | DPWA | Multichannel |
| $-0.008 \pm 0.001$ | [1] SHKLYAR | 13 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| $0.024 \pm 0.014$ | SOKHOYAN | 15A | DPWA | Multichannel |
| $0.024 \pm 0.014$ | GUTZ | 14 | DPWA | Multichannel |
| $0.041 \pm 0.008$ | [1] SHRESTHA | 12A | DPWA | Multichannel |
| $-0.017$ | PENNER | 02D | DPWA | Multichannel |

[1] Statistical error only.

### $N(1900) \to p\gamma$, helicity-3/2 amplitude $A_{3/2}$

| VALUE ($GeV^{-1/2}$) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| $-0.044 \pm 0.014$ | SARANTSEV | 25 | DPWA | Multichannel |
| $-0.094 \pm 0.007$ | [1] HUNT | 19 | DPWA | Multichannel |
| $< 0.001$ | SHKLYAR | 13 | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| $-0.067 \pm 0.030$ | SOKHOYAN | 15A | DPWA | Multichannel |
| $-0.067 \pm 0.030$ | GUTZ | 14 | DPWA | Multichannel |
| $-0.004 \pm 0.006$ | [1] SHRESTHA | 12A | DPWA | Multichannel |
| 0.031 | PENNER | 02D | DPWA | Multichannel |

[1] Statistical error only.

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

| VALUE ($GeV^{-1/2}$) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| $0.007 \pm 0.014$ | [1] HUNT | 19 | DPWA | Multichannel |
| $-0.102 \pm 0.020$ | ANISOVICH | 17E | DPWA | Multichannel |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | |
| $0.000 \pm 0.030$ | ANISOVICH | 13B | DPWA | Multichannel |
| $-0.010 \pm 0.004$ | [1] SHRESTHA | 12A | DPWA | Multichannel |
| $-0.016$ | PENNER | 02D | DPWA | Multichannel |

[1] Statistical error only.

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

| VALUE ($GeV^{-1/2}$) | DOCUMENT ID | | TECN | COMMENT |
|---|---|---|---|---|
| $0.007 \pm 0.011$ | [1] HUNT | 19 | DPWA | Multichannel |
| $0.073 \pm 0.015$ | ANISOVICH | 17E | DPWA | Multichannel |

• • • We do not use the following data for averages, fits, limits, etc. • • •

| | | | | |
|---|---|---|---|---|
| $-0.060 \pm 0.045$ | ANISOVICH | 13B | DPWA | Multichannel |
| $-0.011 \pm 0.007$ | [1] SHRESTHA | 12A | DPWA | Multichannel |
| $-0.002$ | PENNER | 02D | DPWA | Multichannel |

[1] Statistical error only.

## *N*(1900) REFERENCES


| | | | | |
|---|---|---|---|---|
| SARANTSEV | 25 | PR C112 015202 | A.V. Sarantsev *et al.* | (Bonn-Gatchina Collab.) |
| SEIFEN | 25 | EPJ A61 173 | T. Seifen *et al.* | (CBELSA/TAPS Collab.) |
| ROENCHEN | 22 | EPJ A58 229 | D. Roenchen *et al.* | (JULI, GWU, BONN+) |
| MUELLER | 20 | PL B803 135323 | J. Mueller *et al.* | (CBELSA/TAPS Collab.) |
| HUNT | 19 | PR C99 055205 | B.C. Hunt, D.M. Manley | |
| ANISOVICH | 17A | PRL 119 062004 | A.V. Anisovich *et al.* | |
| ANISOVICH | 17B | PL B771 142 | A.V. Anisovich *et al.* | |
| ANISOVICH | 17C | PL B772 247 | A.V. Anisovich *et al.* | |
| ANISOVICH | 17E | PR C96 055202 | A.V. Anisovich *et al.* | (BONN, PNPI, JLAB+) |
| DENISENKO | 16 | PL B755 97 | I. Denisenko *et al.* | |
| SOKHOYAN | 15A | EPJ A51 95 | V. Sokhoyan *et al.* | (CBELSA/TAPS Collab.) |
| GUTZ | 14 | EPJ A50 74 | E. Gutz *et al.* | (CBELSA/TAPS Collab.) |
| SVARC | 14 | PR C89 045205 | A. Svarc *et al.* | (RBI Zagreb, UNI Tuzla) |
| ANISOVICH | 13B | EPJ A49 67 | A.V. Anisovich *et al.* | |
| SHKLYAR | 13 | PR C87 015201 | V. Shklyar, H. Lenske, U. Mosel | (GIES) |
| ANISOVICH | 12A | EPJ A48 15 | A.V. Anisovich *et al.* | (BONN, PNPI) |
| SHRESTHA | 12A | PR C86 055203 | M. Shrestha, D.M. Manley | (KSU) |
| NIKONOV | 08 | PL B662 245 | V.A. Nikonov *et al.* | (Bonn, Gatchina) |
| 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) |
| HOEHLER | 79 | PDAT 12-1 | G. Hohler *et al.* | (KARLT) |