

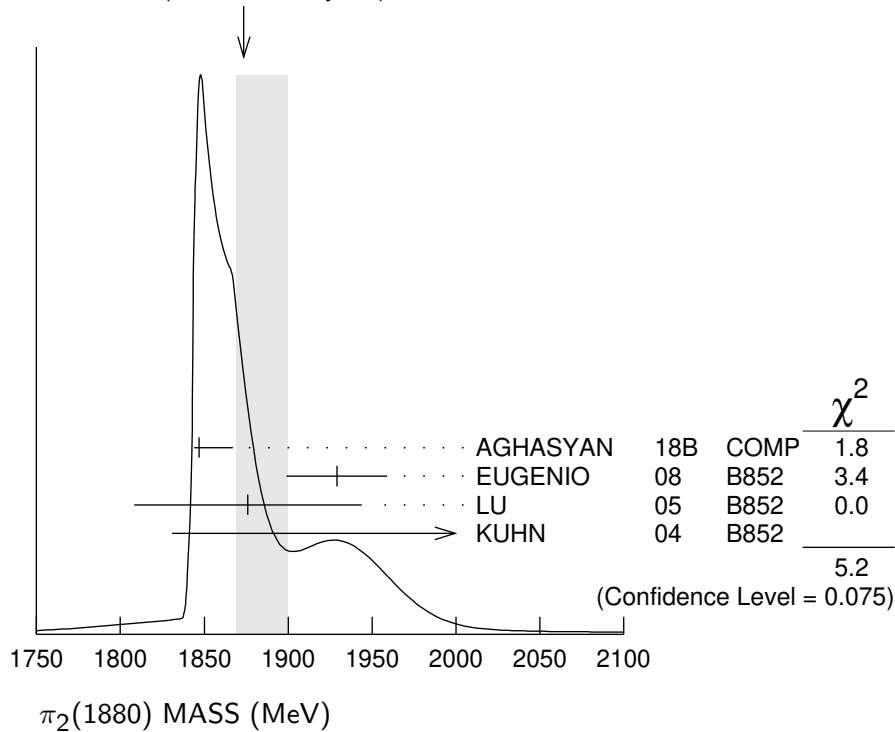
$\pi_2(1880)$

$$I^G(J^{PC}) = 1^-(2^{-+})$$

$\pi_2(1880)$ MASS

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|--|------|-----------------------|------|------|--|
| 1874⁺²⁶₋₅ OUR AVERAGE Error includes scale factor of 1.6. See the ideogram below. | | | | | |
| 1847 ⁺²⁰ ₋₃ | 46M | ¹ AGHASYAN | 18B | COMP | 190 $\pi^- p \rightarrow \pi^- \pi^+ \pi^- p$ |
| 1929 \pm 24 \pm 18 | 4k | EUGENIO | 08 | B852 | - 18 $\pi^- p \rightarrow \eta \eta \pi^- p$ |
| 1876 \pm 11 \pm 67 | 145k | LU | 05 | B852 | - 18 $\pi^- p \rightarrow \omega \pi^- \pi^0 p$ |
| 2003 \pm 88 \pm 148 | 69k | KUHN | 04 | B852 | - 18 $\pi^- p \rightarrow \eta \pi^+ \pi^- \pi^- p$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| 1880 \pm 20 | | ANISOVICH | 01B | SPEC | 0 0.6-1.94 $\bar{p} p \rightarrow \eta \eta \pi^0 \pi^0$ |

WEIGHTED AVERAGE
1874+26-5 (Error scaled by 1.6)



¹ Statistical error negligible.

$\pi_2(1880)$ WIDTH

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | CHG | COMMENT |
|--|------|-----------------------|------|------|---|
| 237⁺³³₋₃₀ OUR AVERAGE Error includes scale factor of 1.2. | | | | | |
| 246 ⁺³³ ₋₂₈ | 46M | ² AGHASYAN | 18B | COMP | 190 $\pi^- p \rightarrow \pi^- \pi^+ \pi^- p$ |
| 323 \pm 87 \pm 43 | 4k | EUGENIO | 08 | B852 | - 18 $\pi^- p \rightarrow \eta \eta \pi^- p$ |

146 ± 17 ± 62 145k LU 05 B852 − 18 π[−] p → ω π[−] π⁰ p
 306 ± 132 ± 121 69k KUHN 04 B852 − 18 π[−] p → η π⁺ π[−] π[−] p
 • • • We do not use the following data for averages, fits, limits, etc. • • •
 255 ± 45 ANISOVICH 01B SPEC 0 0.6–1.94 $\bar{p}p \rightarrow \eta\eta\pi^0\pi^0$

²Statistical error negligible.

π₂(1880) DECAY MODES

| Mode | Fraction (Γ _{<i>i</i>} /Γ) |
|--|-------------------------------------|
| Γ ₁ ηηπ [−] | seen |
| Γ ₂ a ₀ (980)η | seen |
| Γ ₃ a ₂ (1320)η | seen |
| Γ ₄ f ₀ (1500)π | seen |
| Γ ₅ f ₁ (1285)π | seen |
| Γ ₆ ω π [−] π ⁰ | seen |

Γ(a₂(1320)η)/Γ(f₁(1285)π) Γ₃/Γ₅

VALUE EVTS DOCUMENT ID TECN CHG COMMENT
 • • • We do not use the following data for averages, fits, limits, etc. • • •
 22.7 ± 7.3 69k KUHN 04 B852 − 18 π[−] p → η π⁺ π[−] π[−] p

Γ(f₀(1500)π)/Γ(a₀(980)η) Γ₄/Γ₂

VALUE DOCUMENT ID TECN CHG COMMENT
 • • • We do not use the following data for averages, fits, limits, etc. • • •
 0.28^{+0.20}_{−0.15} ³ ANISOVICH 01B SPEC 0 0.6–1.94 $\bar{p}p \rightarrow \eta\eta\pi^0\pi^0$

³Systematic errors not estimated.

π₂(1880) REFERENCES

| | | | | |
|-----------|-----|---------------|------------------------------|--------------------|
| AGHASYAN | 18B | PR D98 092003 | M. Aghasyan <i>et al.</i> | (COMPASS Collab.) |
| EUGENIO | 08 | PL B660 466 | P. Eugenio <i>et al.</i> | (BNL E852 Collab.) |
| LU | 05 | PRL 94 032002 | M. Lu <i>et al.</i> | (BNL E852 Collab.) |
| KUHN | 04 | PL B595 109 | J. Kuhn <i>et al.</i> | (BNL E852 Collab.) |
| ANISOVICH | 01B | PL B500 222 | A.V. Anisovich <i>et al.</i> | |