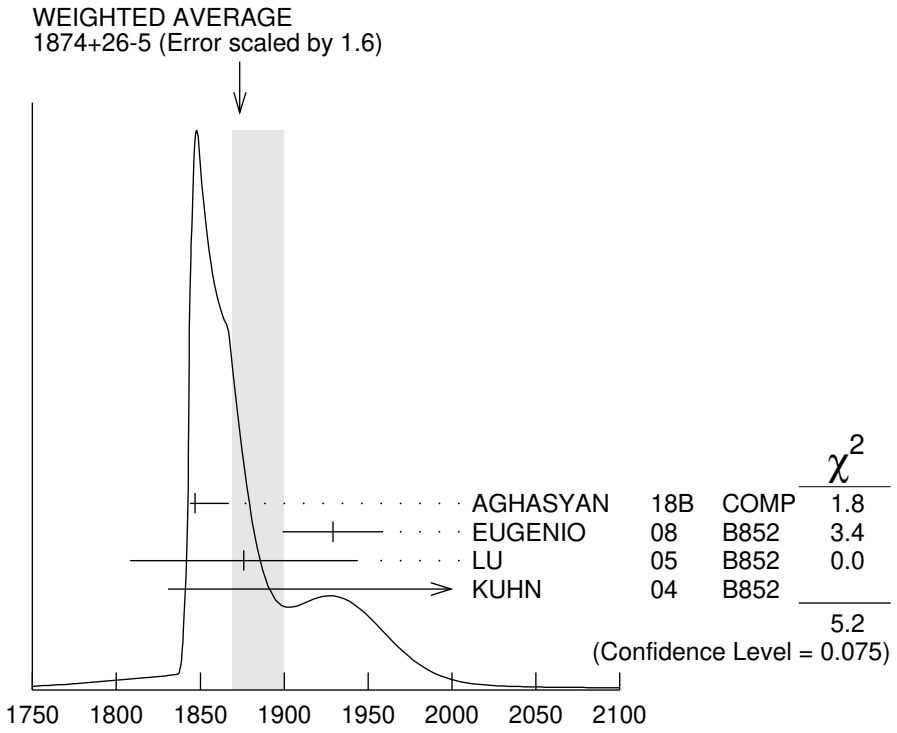
$\pi_2(1880)$

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

$\pi_2(1880)$ 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 ± 20		ANISOVICH	01B	SPEC	0	0.6–1.94 $\overline{p}p \rightarrow \eta\eta\pi^0\pi^0$

[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 $\pi^- p \rightarrow \omega\pi^-\pi^0 p$
306±132±121	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. • • •

255± 45		ANISOVICH	01B	SPEC	0	0.6–1.94 $\overline{p}p \rightarrow \eta\eta\pi^0\pi^0$

[2] Statistical error negligible.

$\pi_2(1880)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\eta\eta\pi^-$	seen
Γ_2	$a_0(980)\eta$	seen
Γ_3	$a_2(1320)\eta$	seen
Γ_4	$f_0(1500)\pi$	seen
Γ_5	$f_1(1285)\pi$	seen
Γ_6	$\omega\pi^-\pi^0$	seen

$\Gamma(a_2(1320)\eta)/\Gamma(f_1(1285)\pi)$ Γ_3/Γ_5

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 $\pi^- p \rightarrow \eta\pi^+\pi^-\pi^- p$

$\Gamma(f_0(1500)\pi)/\Gamma(a_0(980)\eta)$ Γ_4/Γ_2

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 $\overline{p}p \rightarrow \eta\eta\pi^0\pi^0$

[3] Systematic errors not estimated.

$\pi_2(1880)$ REFERENCES

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