$f_2(1910)$

$I^G(J^{PC}) = 0^+(2^{++})$

OMITTED FROM SUMMARY TABLE

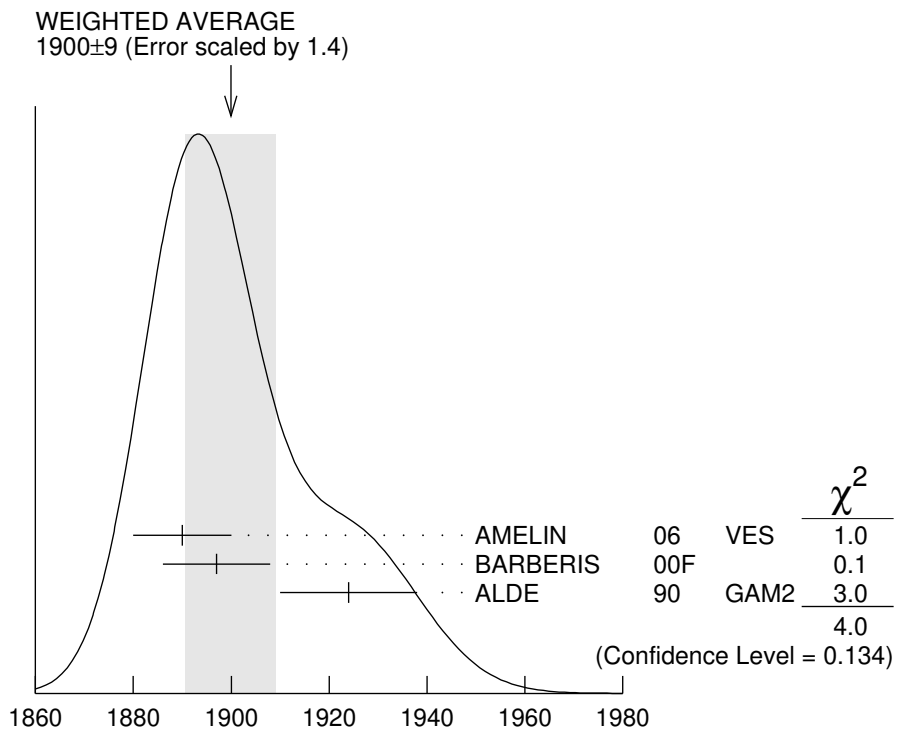
We list here three different peaks with close masses and widths seen in the mass distributions of $\omega\omega$, $\eta\eta'$, and K^+K^- final states. ALDE 91B argues that they are of different nature.

$f_2(1910)$ MASS

$f_2(1910)$ $\omega\omega$ MODE

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
1900± 9 OUR AVERAGE	Error includes scale factor of 1.4. See the ideogram below.			
1890±10	[1] AMELIN	06	VES	36 $\pi^- p \to \omega\omega n$
1897±11	BARBERIS	00F		450 $pp \to p_f \omega\omega p_s$
1924±14	ALDE	90	GAM2	38 $\pi^- p \to \omega\omega n$

[1] Supersedes BELADIDZE 92B.



$f_2(1910)$ $\omega\omega$ MODE MASS (MeV)

$f_2(1910)$ $\eta\eta'$ MODE

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
1934±16	[1] BARBERIS	00A		450 $pp \to p_f \eta\eta' p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1934±20	[2] ANISOVICH	00J	SPEC	
1911±10	ALDE	91B	GAM2	38 $\pi^- p \to \eta\eta' n$

[1] Also compatible with $J^{PC} = 1^{-+}$.
[2] Combined fit with $\eta\eta$, $\pi\pi$, and $\eta\pi\pi$.

$f_2(1910)$ K^+K^- MODE

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1941±18	[1] AMSLER	06	CBAR	1.64 $\overline{p}p \rightarrow K^+K^-\pi^0$

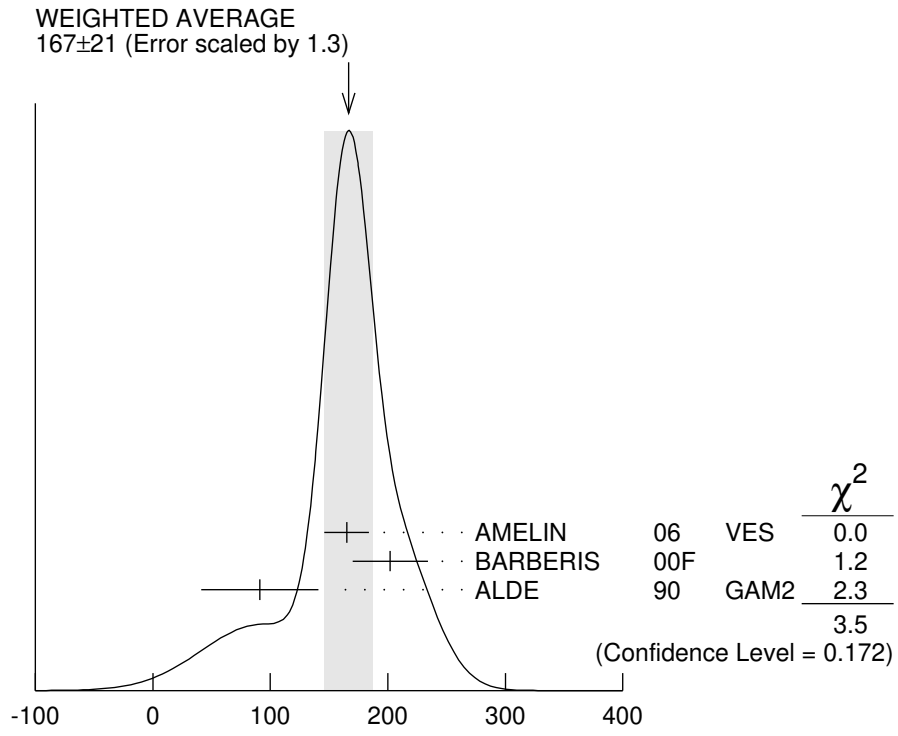
[1] Tentative, could be $f_2(1950)$.

$f_2(1910)$ WIDTH

$f_2(1910)$ $\omega\omega$ MODE

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
167±21 OUR AVERAGE Error includes scale factor of 1.3. See the ideogram below.				
165±19	[1] AMELIN	06	VES	36 $\pi^- p \rightarrow \omega\omega n$
202±32	BARBERIS	00F		450 $pp \rightarrow p_f \omega\omega p_s$
91±50	ALDE	90	GAM2	38 $\pi^- p \rightarrow \omega\omega n$

[1] Supersedes BELADIDZE 92B.



$f_2(1910)\,\eta\eta'$ MODE

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
141±41	[1] BARBERIS	00A		450 $pp \to p_f \eta\eta' p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
271±25	[2] ANISOVICH	00J	SPEC	
90±35	ALDE	91B	GAM2	38 $\pi^- p \to \eta\eta' n$

[1] Also compatible with $J^{PC}=1^{-+}$.
[2] Combined fit with $\eta\eta$, $\pi\pi$, and $\eta\pi\pi$.

$f_2(1910)\,K^+K^-$ MODE

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
120±40	AMSLER	06	CBAR	1.64 $\overline{p}p \to K^+K^-\pi^0$

$f_2(1910)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\pi^0\pi^0$	
Γ_2	K^+K^-	seen
Γ_3	$K^0_S K^0_S$	
Γ_4	$\eta\eta$	seen
Γ_5	$\omega\omega$	seen
Γ_6	$\eta\eta'$	seen
Γ_7	$\eta'\eta'$	
Γ_8	$\rho\rho$	seen
Γ_9	$a_2(1320)\pi$	seen
Γ_{10}	$f_2(1270)\eta$	seen

$f_2(1910)$ BRANCHING RATIOS

$\Gamma(K^+K^-)/\Gamma_{\text{total}}$ Γ_2/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
seen	[1] AMSLER	06	CBAR	1.64 $\overline{p}p \to K^+K^-\pi^0$

[1] Tentative, could be $f_2(1950)$.

$\Gamma(\pi^0\pi^0)/\Gamma(\eta\eta')$ Γ_1/Γ_6

VALUE	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<0.1	ALDE	89	GAM2	38$\pi^- p \to \eta\eta' n$

$\Gamma(K^0_S K^0_S)/\Gamma(\eta\eta')$ Γ_3/Γ_6

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<0.066	90	BALOSHIN	86	SPEC	40$\pi p \to K^0_S K^0_S n$

$\Gamma(\eta\eta)/\Gamma(\eta\eta')$ Γ_4/Γ_6

VALUE	CL%	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<0.05	90	ALDE	91B	GAM2	38 $\pi^- p \to \eta\eta' n$

$\Gamma(\omega\omega)/\Gamma(\eta\eta')$ Γ_5/Γ_6

VALUE	DOCUMENT ID		COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
2.6±0.6	BARBERIS	00F	450 $pp \to p_f \omega\omega p_s$

$\Gamma(\eta'\eta')/\Gamma_{\text{total}}$ Γ_7/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
probably not seen	BARBERIS	00A		450 $pp \to p_f \eta'\eta' p_s$
possibly seen	BELADIDZE	92D	VES	37 $\pi^- p \to \eta'\eta' n$

$\Gamma(\rho\rho)/\Gamma(\omega\omega)$ Γ_8/Γ_5

VALUE	DOCUMENT ID		COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
2.6±0.4	BARBERIS	00F	450 $pp \to p_f \omega\omega p_s$

$\Gamma(f_2(1270)\eta)/\Gamma(a_2(1320)\pi)$ Γ_{10}/Γ_9

VALUE	DOCUMENT ID		TECN	COMMENT
0.09±0.05	[1] ANISOVICH	11	SPEC	0.9–1.94 $p\overline{p}$

[1] Reanalysis of ADOMEIT 96 and ANISOVICH 00E.

$f_2(1910)$ REFERENCES

ANISOVICH	11	EPJ C71 1511	A.V. Anisovich *et al.*	(LOQM, RAL, PNPI)
AMELIN	06	PAN 69 690 Translated from YAF 69 715.	D.V. Amelin *et al.*	(VES Collab.)
AMSLER	06	PL B639 165	C. Amsler *et al.*	(Crystal Barrel Collab.)
ANISOVICH	00E	PL B477 19	A.V. Anisovich *et al.*	
ANISOVICH	00J	PL B491 47	A.V. Anisovich *et al.*	(RAL, LOQM, PNPI+)
BARBERIS	00A	PL B471 429	D. Barberis *et al.*	(WA 102 Collab.)
BARBERIS	00F	PL B484 198	D. Barberis *et al.*	(WA 102 Collab.)
ADOMEIT	96	ZPHY C71 227	J. Adomeit *et al.*	(Crystal Barrel Collab.)
BELADIDZE	92B	ZPHY C54 367	G.M. Beladidze *et al.*	(VES Collab.)
BELADIDZE	92D	ZPHY C57 13	G.M. Beladidze *et al.*	(VES Collab.)
ALDE	91B	SJNP 54 455 Translated from YAF 54 751.	D.M. Alde *et al.*	(SERP, BELG, LANL, LAPP+)
Also		PL B276 375	D.M. Alde *et al.*	(BELG, SERP, KEK, LANL+)
ALDE	90	PL B241 600	D.M. Alde *et al.*	(SERP, BELG, LANL, LAPP+)
ALDE	89	PL B216 447	D.M. Alde *et al.*	(SERP, BELG, LANL, LAPP)
Also		SJNP 48 1035 Translated from YAF 48 1724.	D.M. Alde *et al.*	(BELG, SERP, LANL, LAPP)
BALOSHIN	86	SJNP 43 959 Translated from YAF 43 1487.	O.N. Baloshin *et al.*	(ITEP)