$f_2(1950)$

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

OMITTED FROM SUMMARY TABLE

Needs confirmation.

$f_2(1950)$ MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
1960±30	[1] BARBERIS	97B	OMEG		450 $pp \rightarrow pp2(\pi^+\pi^-)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1918±12	ANTINORI	95	OMEG		300,450 $pp \rightarrow pp2(\pi^+\pi^-)$
~ 1996	HASAN	94	RVUE		$\overline{p}p \rightarrow \pi\pi$
~ 1990	[2] OAKDEN	94	RVUE		0.36–1.55 $\overline{p}p \rightarrow \pi\pi$
1950±15	[3] ASTON	91	LASS	0	11 $K^- p \rightarrow \Lambda K \overline{K}\pi\pi$

[1] Possibly two states.
[2] From solution B of amplitude analysis of data on $\overline{p}p \rightarrow \pi\pi$. See however KLOET 96 who fit $\pi^+\pi^-$ only and find waves only up to $J = 3$ to be important but not significantly resonant.
[3] Cannot determine spin to be 2.

$f_2(1950)$ WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
460±40	[4] BARBERIS	97B	OMEG		450 $pp \rightarrow pp2(\pi^+\pi^-)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
390±60	ANTINORI	95	OMEG		300,450 $pp \rightarrow pp2(\pi^+\pi^-)$
~ 134	HASAN	94	RVUE		$\overline{p}p \rightarrow \pi\pi$
~ 100	[5] OAKDEN	94	RVUE		0.36–1.55 $\overline{p}p \rightarrow \pi\pi$
250±50	[6] ASTON	91	LASS	0	11 $K^- p \rightarrow \Lambda K \overline{K}\pi\pi$

[4] Possibly two states.
[5] From solution B of amplitude analysis of data on $\overline{p}p \rightarrow \pi\pi$. See however KLOET 96 who fit $\pi^+\pi^-$ only and find waves only up to $J = 3$ to be important but not significantly resonant.
[6] Cannot determine spin to be 2.

$f_2(1950)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$K^*(892)\overline{K}^*(892)$	seen
Γ_2	$\pi^+\pi^-$	seen
Γ_3	$\pi^+\pi^-\pi^+\pi^-$	possibly seen
Γ_4	$a_2(1320)\pi$	
Γ_5	$f_2(1270)\pi\pi$	

$f_2(1950)$ BRANCHING RATIOS

$\Gamma(K^*(892)\overline{K}^*(892))/\Gamma_{total}$ — Γ_1/Γ

VALUE	*DOCUMENT ID*		*TECN*	*CHG*	*COMMENT*
seen	ASTON	91	LASS	0	11 $K^- p \to \Lambda K \overline{K}\pi\pi$

$\Gamma(a_2(1320)\pi)/\Gamma_{total}$ — Γ_4/Γ

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •				
possibly seen	BARBERIS	97B	OMEG	450 $pp \to pp2(\pi^+\pi^-)$

$f_2(1950)$ REFERENCES

BARBERIS	97B	PL B413 217	D. Barberis+	(WA102 Collab.)
KLOET	96	PR D53 6120	+Myhrer	(RUTG, NORD)
ANTINORI	95	PL B353 589	+Barberis, Bayes+	(ATHU, BARI, BIRM, CERN, JINR) JP
HASAN	94	PL B334 215	+Bugg	(LOQM)
OAKDEN	94	NPA 574 731	+Pennington	(DURH)
ASTON	91	NP B21 5 (suppl)	+Awaji+	(LASS Collab.)

OTHER RELATED PAPERS

ALBRECHT	88N	PL B212 528	+	(ARGUS Collab.)
ALBRECHT	87Q	PL B198 255	+Binder+	(ARGUS Collab.)
ARMSTRONG	87C	ZPHY C34 33	+Bloodworth+	(CERN, BIRM, BARI, ATHU, CURIN+)