$f_0(2020)$

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

OMITTED FROM SUMMARY TABLE

Needs confirmation.

$f_0(2020)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
1992±16		[1,2] BARBERIS	00C		450 $pp \to p_f 4\pi p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
2037± 8	80k	[3] UMAN	06	E835	5.2 $\overline{p}p \to \eta\eta\pi^0$
2040±38		ANISOVICH	00J	SPEC	
2010±60		ALDE	98	GAM4	100 $\pi^- p \to \pi^0\pi^0 n$
2020±35		BARBERIS	97B	OMEG	450 $pp \to pp2(\pi^+\pi^-)$

[1] Average between $\pi^+\pi^-2\pi^0$ and $2(\pi^+\pi^-)$.
[2] T-matrix pole.
[3] Statistical error only.

$f_0(2020)$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
442± 60		[4,5] BARBERIS	00C		450 $pp \to p_f 4\pi p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
296± 17	80k	[6] UMAN	06	E835	5.2 $\overline{p}p \to \eta\eta\pi^0$
405± 40		ANISOVICH	00J	SPEC	
240±100		ALDE	98	GAM4	100 $\pi^- p \to \pi^0\pi^0 n$
410± 50		BARBERIS	97B	OMEG	450 $pp \to pp2(\pi^+\pi^-)$

[4] Average between $\pi^+\pi^-2\pi^0$ and $2(\pi^+\pi^-)$.
[5] T-matrix pole.
[6] Statistical error only.

$f_0(2020)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\rho\pi\pi$	seen
Γ_2	$\pi^0\pi^0$	seen
Γ_3	$\rho\rho$	seen
Γ_4	$\omega\omega$	seen
Γ_5	$\eta\eta$	seen

$f_0(2020)$ BRANCHING RATIOS

$\Gamma(\rho\rho)/\Gamma(\omega\omega)$ — Γ_3/Γ_4

VALUE	DOCUMENT ID		COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
~ 3	BARBERIS	00F	450 $pp \to p_f \omega\omega p_s$

$\Gamma(\eta\eta)/\Gamma_{total}$ — Γ_5/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
seen	UMAN	06	E835	5.2 $\overline{p}p \rightarrow \eta\eta\pi^0$

$f_0(2020)$ REFERENCES

UMAN	06	PR D73 052009	I. Uman *et al.*	(FNAL E835)
ANISOVICH	00J	PL B491 47	A.V. Anisovich *et al.*	
BARBERIS	00C	PL B471 440	D. Barberis *et al.*	(WA 102 Collab.)
BARBERIS	00F	PL B484 198	D. Barberis *et al.*	(WA 102 Collab.)
ALDE	98	EPJ A3 361	D. Alde *et al.*	(GAM4 Collab.)
Also		PAN 62 405	D. Alde *et al.*	(GAMS Collab.)
		Translated from YAF 62 446.		
BARBERIS	97B	PL B413 217	D. Barberis *et al.*	(WA 102 Collab.)

OTHER RELATED PAPERS

IWASAKI	05A	PR D72 094016	M. Iwasaki, T. Fukutome