

$f_0(2020)$

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

OMITTED FROM SUMMARY TABLE
Needs confirmation.

$f_0(2020)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
1992±16		^{1,2} BARBERIS	00C	450 $p p \rightarrow p_f 4\pi p_S$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
2037± 8	80k	³ UMAN	06	E835 5.2 $\bar{p} p \rightarrow \eta \eta \pi^0$
2040±38		ANISOVICH	00J	SPEC
2010±60		ALDE	98	GAM4 100 $\pi^- p \rightarrow \pi^0 \pi^0 n$
2020±35		BARBERIS	97B	OMEG 450 $p p \rightarrow p p 2(\pi^+ \pi^-)$
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 $p p \rightarrow p_f 4\pi p_S$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
296± 17	80k	⁶ UMAN	06	E835 5.2 $\bar{p} p \rightarrow \eta \eta \pi^0$
405± 40		ANISOVICH	00J	SPEC
240±100		ALDE	98	GAM4 100 $\pi^- p \rightarrow \pi^0 \pi^0 n$
410± 50		BARBERIS	97B	OMEG 450 $p p \rightarrow p p 2(\pi^+ \pi^-)$
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)
$\Gamma_1 \quad \rho \pi \pi$	seen
$\Gamma_2 \quad \pi^0 \pi^0$	seen
$\Gamma_3 \quad \rho \rho$	seen
$\Gamma_4 \quad \omega \omega$	seen
$\Gamma_5 \quad \eta \eta$	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	$pp \rightarrow p_f \omega \omega p_s$	

$\Gamma(\eta\eta)/\Gamma_{\text{total}}$				Γ_5/Γ
VALUE	DOCUMENT ID	TECN	COMMENT	
seen	UMAN	06	E835	$5.2 \bar{p}p \rightarrow \eta\eta\pi^0$

 $f_0(2020)$ REFERENCES

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