

**$f_0(2020)$**

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

OMITTED FROM SUMMARY TABLE

Needs confirmation.

### $f_0(2020)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>1992±16</b>		<sup>1,2</sup> BARBERIS	00C	450 $p\bar{p} \rightarrow p_f 4\pi p_S$
• • •				We do not use the following data for averages, fits, limits, etc. • • •
2037±8	80k	<sup>3</sup> 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 $p\bar{p} \rightarrow p\bar{p}2(\pi^+\pi^-)$

<sup>1</sup> Average between  $\pi^+\pi^-2\pi^0$  and  $2(\pi^+\pi^-)$ .

<sup>2</sup> T-matrix pole.

<sup>3</sup> Statistical error only.

### $f_0(2020)$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>442±60</b>		<sup>4,5</sup> BARBERIS	00C	450 $p\bar{p} \rightarrow p_f 4\pi p_S$
• • •				We do not use the following data for averages, fits, limits, etc. • • •
296±17	80k	<sup>6</sup> 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 $p\bar{p} \rightarrow p\bar{p}2(\pi^+\pi^-)$

<sup>4</sup> Average between  $\pi^+\pi^-2\pi^0$  and  $2(\pi^+\pi^-)$ .

<sup>5</sup> T-matrix pole.

<sup>6</sup> Statistical error only.

### $f_0(2020)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $\rho\pi\pi$	seen
$\Gamma_2$ $\pi^0\pi^0$	seen
$\Gamma_3$ $\rho\rho$	seen
$\Gamma_4$ $\omega\omega$	seen
$\Gamma_5$ $\eta\eta$	seen

### $f_0(2020)$ BRANCHING RATIOS

$\Gamma(\rho\rho)/\Gamma(\omega\omega)$		$\Gamma_3/\Gamma_4$
VALUE	DOCUMENT ID	COMMENT
• • •		We do not use the following data for averages, fits, limits, etc. • • •
~ 3	BARBERIS	00F 450 $p\bar{p} \rightarrow p_f\omega\omega p_S$

$\Gamma(\eta\eta)/\Gamma_{\text{total}}$				$\Gamma_5/\Gamma$
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
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.)