# $f_0(2020)$

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

OMITTED FROM SUMMARY TABLE

Needs confirmation.

## $f_0(2020)$ MASS

| *VALUE* (MeV) | | *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. • • • | | | | | |
| 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.

## $f_0(2020)$ WIDTH

| *VALUE* (MeV) | | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|---|
| **442± 60** | [3,4] | BARBERIS | 00C | | 450 $pp \to p_f 4\pi p_s$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| 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 $pp \to pp2(\pi^+\pi^-)$ |

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

## $f_0(2020)$ 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 |

## $f_0(2020)$ 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 $pp \to p_f \omega\omega p_s$ |

## $f_0$(2020) REFERENCES


| | | | | |
|---|---|---|---|---|
| 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 | 99 | PAN 62 405 | D. Alde *et al.* | (GAMS Collab.) |
| BARBERIS | 97B | PL B413 217 | D. Barberis *et al.* | (WA 102 Collab.) |