# $f_2(2340)$

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

## $f_2(2340)$ MASS

| *VALUE* (MeV) | *EVTS* | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|---|
| **2339±55** | | [1] ETKIN | 88 | MPS | 22 $\pi^- p \rightarrow \phi\phi n$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| 2350± 7 | 80k | [2] UMAN | 06 | E835 | 5.2 $\overline{p}p \rightarrow \eta\eta\pi^0$ |
| 2392±10 | | BOOTH | 86 | OMEG | 85 $\pi^-$ Be $\rightarrow 2\phi$Be |
| 2360±20 | | LINDENBAUM | 84 | RVUE | |

[1] Includes data of ETKIN 85. The percentage of the resonance going into $\phi\phi$ $2^{++}$ $S_2$, $D_2$, and $D_0$ is 37 ± 19, $4^{+12}_{-4}$, and $59^{+21}_{-19}$, respectively.

[2] Statistical error only.

## $f_2(2340)$ WIDTH

| *VALUE* (MeV) | *EVTS* | *DOCUMENT ID* | | *TECN* | *COMMENT* |
|---|---|---|---|---|---|
| $\mathbf{319^{+\ 81}_{-\ 69}}$ | | [3] ETKIN | 88 | MPS | 22 $\pi^- p \rightarrow \phi\phi n$ |
| • • • We do not use the following data for averages, fits, limits, etc. • • • | | | | | |
| 218± 16 | 80k | [4] UMAN | 06 | E835 | 5.2 $\overline{p}p \rightarrow \eta\eta\pi^0$ |
| 198± 50 | | BOOTH | 86 | OMEG | 85 $\pi^-$ Be $\rightarrow 2\phi$Be |
| $150^{+150}_{-\ 50}$ | | LINDENBAUM | 84 | RVUE | |

[3] Includes data of ETKIN 85.

[4] Statistical error only.

## $f_2(2340)$ DECAY MODES

| | Mode | Fraction ($\Gamma_i/\Gamma$) |
|---|---|---|
| $\Gamma_1$ | $\phi\phi$ | seen |
| $\Gamma_2$ | $\eta\eta$ | seen |

## $f_2(2340)$ BRANCHING RATIOS

### $\Gamma(\eta\eta)/\Gamma_{\text{total}}$ $\Gamma_2/\Gamma$

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

## $f_2(2340)$ REFERENCES


| | | | | |
|---|---|---|---|---|
| UMAN | 06 | PR D73 052009 | I. Uman *et al.* | (FNAL E835) |
| ETKIN | 88 | PL B201 568 | A. Etkin *et al.* | (BNL, CUNY) |
| BOOTH | 86 | NP B273 677 | P.S.L. Booth *et al.* | (LIVP, GLAS, CERN) |
| ETKIN | 85 | PL 165B 217 | A. Etkin *et al.* | (BNL, CUNY) |
| LINDENBAUM | 84 | CNPP 13 285 | S.J. Lindenbaum | (CUNY) |