

**$f_0(2200)$** 

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

## OMITTED FROM SUMMARY TABLE

Seen in  $K_S^0 K_S^0$  (AUGUSTIN 88),  $K^+ K^-$  (ABLIKIM 05Q) and  $\eta\eta$  (BINON 05) system. Not seen in  $\Upsilon(1S)$  radiative decays (BARU 89).

 **$f_0(2200)$  MASS**

| VALUE (MeV)   | DOCUMENT ID           | TECN | COMMENT  |
|---|-----------------------|------|--|
| <b>2189 ± 13 OUR AVERAGE</b>  |                       |      |  |
| 2170 ± 20 <sup>+10</sup> <sub>-15</sub>                                       | ABLIKIM               | 05Q  | BES2 $\psi(2S) \rightarrow \gamma\pi^+\pi^-K^+K^-$ |
| 2210 ± 50   | <sup>1</sup> BINON    | 05   | GAMS 33 $\pi^-p \rightarrow \eta\eta n$            |
| 2197 ± 17   | <sup>2</sup> AUGUSTIN | 88   | DM2 $J/\psi \rightarrow \gamma K_S^0 K_S^0$        |
| ● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ● |                       |      |  |
| ~ 2122  | HASAN                 | 94   | RVUE $\bar{p}p \rightarrow \pi\pi$                 |
| ~ 2321  | HASAN                 | 94   | RVUE $\bar{p}p \rightarrow \pi\pi$                 |

<sup>1</sup> First solution, PWA is ambiguous.<sup>2</sup> Cannot determine spin to be 0. **$f_0(2200)$  WIDTH**

| VALUE (MeV)   | DOCUMENT ID                         | TECN | COMMENT  |
|---|-------------------------------------|------|--|
| <b>238 ± 50 OUR AVERAGE</b>   | Error includes scale factor of 1.2. |      |  |
| 220 ± 60 <sup>+40</sup> <sub>-45</sub>  | ABLIKIM                             | 05Q  | BES2 $\psi(2S) \rightarrow \gamma\pi^+\pi^-K^+K^-$ |
| 380 ± 90  | <sup>3</sup> BINON                  | 05   | GAMS 33 $\pi^-p \rightarrow \eta\eta n$            |
| 201 ± 51  | <sup>4</sup> AUGUSTIN               | 88   | DM2 $J/\psi \rightarrow \gamma K_S^0 K_S^0$        |
| ● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ● |                                     |      |  |
| ~ 273   | HASAN                               | 94   | RVUE $\bar{p}p \rightarrow \pi\pi$                 |
| ~ 223   | HASAN                               | 94   | RVUE $\bar{p}p \rightarrow \pi\pi$                 |

<sup>3</sup> First solution, PWA is ambiguous.<sup>4</sup> Cannot determine spin to be 0. **$f_0(2200)$  REFERENCES**

|          |     |                             |                             |               |
|----------|-----|-----------------------------|-----------------------------|---------------|
| ABLIKIM  | 05Q | PR D72 092002               | M. Ablikim <i>et al.</i>    | (BES Collab.) |
| BINON    | 05  | PAN 68 960                  | F. Binon <i>et al.</i>      |               |
|          |     | Translated from YAF 68 998. |                             |               |
| HASAN    | 94  | PL B334 215                 | A. Hasan, D.V. Bugg         | (LOQM)        |
| BARU     | 89  | ZPHY C42 505                | S.E. Baru <i>et al.</i>     | (NOVO)        |
| AUGUSTIN | 88  | PRL 60 2238                 | J.E. Augustin <i>et al.</i> | (DM2 Collab.) |

**OTHER RELATED PAPERS**

|              |     |               |                                      |                     |
|--------------|-----|---------------|--------------------------------------|---------------------|
| IWASAKI      | 05A | PR D72 094016 | M. Iwasaki, T. Fukutome              |                     |
| VIJANDE      | 05  | PR D72 034025 | J. Vijande, A. Valarce, F. Fernandez |                     |
| EISENHAND... | 75  | NP B96 109    | E. Eisenhandler <i>et al.</i>        | (LOQM, LIVP, DARE+) |