

$f_2(1430)$

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

OMITTED FROM SUMMARY TABLE

This entry lists nearby peaks observed in the D wave of the $K\bar{K}$ and $\pi^+\pi^-$ systems. Needs confirmation.

 $f_2(1430)$ MASS

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|---|------------------------------|------|--|
| ≈ 1430 OUR ESTIMATE | | | |
| ● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ● | | | |
| $1440 \pm 11 \pm 3$ | LEES | 21A | BABR $\gamma\gamma \rightarrow \eta_c(1S) \rightarrow \eta' \pi^+ \pi^-$ |
| 1453 ± 4 | ¹ VLADIMIRSK...01 | SPEC | $40 \pi^- p \rightarrow K_S^0 K_S^0 n$ |
| 1421 ± 5 | AUGUSTIN | 87 | DM2 $J/\psi \rightarrow \gamma \pi^+ \pi^-$ |
| 1480 ± 50 | AKESSON | 86 | SPEC $pp \rightarrow pp \pi^+ \pi^-$ |
| 1436^{+26}_{-16} | DAUM | 84 | CNTR $17-18 \pi^- p \rightarrow K^+ K^- n$ |
| 1412 ± 3 | DAUM | 84 | CNTR $63 \pi^- p \rightarrow K_S^0 K_S^0 n, K^+ K^- n$ |
| 1439^{+5}_{-6} | ² BEUSCH | 67 | OSPK $5,7,12 \pi^- p \rightarrow K_S^0 K_S^0 n$ |
| ¹ $J^{PC} = 0^{++}$ or 2^{++} . | | | |
| ² Not seen by WETZEL 76. | | | |

 $f_2(1430)$ WIDTH

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|---|------------------------------|------|--|
| ● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ● | | | |
| $46 \pm 15 \pm 5$ | LEES | 21A | BABR $\gamma\gamma \rightarrow \eta_c(1S) \rightarrow \eta' \pi^+ \pi^-$ |
| 13 ± 5 | ³ VLADIMIRSK...01 | SPEC | $40 \pi^- p \rightarrow K_S^0 K_S^0 n$ |
| 30 ± 9 | AUGUSTIN | 87 | DM2 $J/\psi \rightarrow \gamma \pi^+ \pi^-$ |
| 150 ± 50 | AKESSON | 86 | SPEC $pp \rightarrow pp \pi^+ \pi^-$ |
| 81^{+56}_{-29} | DAUM | 84 | CNTR $17-18 \pi^- p \rightarrow K^+ K^- n$ |
| 14 ± 6 | DAUM | 84 | CNTR $63 \pi^- p \rightarrow K_S^0 K_S^0 n, K^+ K^- n$ |
| 43^{+17}_{-18} | ⁴ BEUSCH | 67 | OSPK $5,7,12 \pi^- p \rightarrow K_S^0 K_S^0 n$ |
| ³ $J^{PC} = 0^{++}$ or 2^{++} . | | | |
| ⁴ Not seen by WETZEL 76. | | | |

 $f_2(1430)$ DECAY MODES

| Mode |
|---------------------------|
| $\Gamma_1 \quad K\bar{K}$ |
| $\Gamma_2 \quad \pi\pi$ |

$f_2(1430)$ REFERENCES

| | | | | |
|---------------|-----|------------------------------|-------------------------------|------------------------------|
| LEES | 21A | PR D104 072002 | J.P. Lees <i>et al.</i> | (BABAR Collab.) |
| VLADIMIRSK... | 01 | PAN 64 1895 | V.V. Vladimisky <i>et al.</i> | |
| | | Translated from YAF 64 1979. | | |
| AUGUSTIN | 87 | ZPHY C36 369 | J.E. Augustin <i>et al.</i> | (LALO, CLER, FRAS+) |
| AKESSON | 86 | NP B264 154 | T. Akesson <i>et al.</i> | (Axial Field Spec. Collab.) |
| DAUM | 84 | ZPHY C23 339 | C. Daum <i>et al.</i> | (AMST, CERN, CRAC, MPIM+) JP |
| WETZEL | 76 | NP B115 208 | W. Wetzel <i>et al.</i> | (ETH, CERN, LOIC) |
| BEUSCH | 67 | PL 25B 357 | W. Beusch <i>et al.</i> | (ETH, CERN) |
