

# $f_1(1510)$

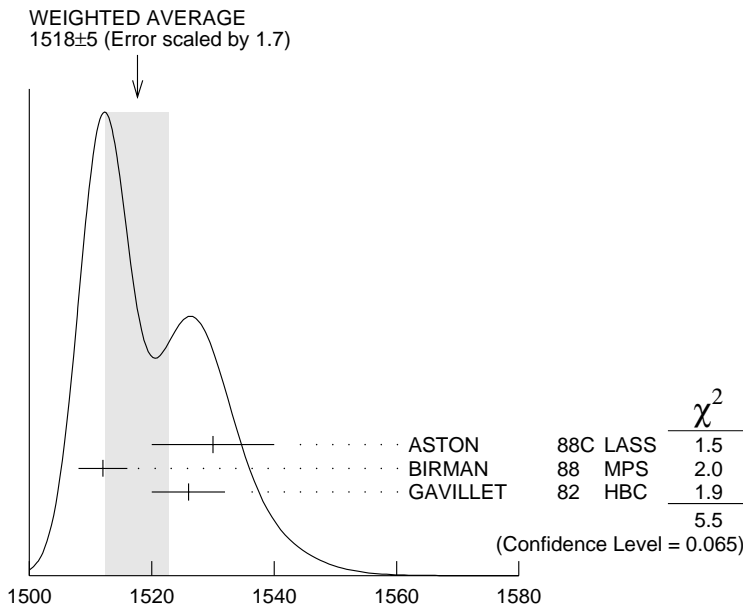
$$I^G(J^{PC}) = 0^+(1^{++})$$

OMITTED FROM SUMMARY TABLE

See the minireview under  $\eta(1440)$ .

## $f_1(1510)$ MASS

| VALUE (MeV)   | EVTS | DOCUMENT ID   | TECN     | COMMENT  |
|---|------|---|----------|--|
| <b>1518 ± 5 OUR AVERAGE</b>   |      | Error includes scale factor of 1.7. See the ideogram below. |          |  |
| 1530 ± 10   |      | ASTON   | 88C LASS | 11 $K^- p \rightarrow K_S^0 K^\pm \pi^\mp \Lambda$   |
| 1512 ± 4  | 600  | <sup>1</sup> BIRMAN   | 88 MPS   | 8 $\pi^- p \rightarrow K^+ \bar{K}^0 \pi^- n$        |
| 1526 ± 6  | 271  | GAVILLET  | 82 HBC   | 4.2 $K^- p \rightarrow \Lambda K K \pi$              |
| ● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ● |      |   |          |  |
| ~ 1525  |      | <sup>2</sup> BAUER  | 93B      | $\gamma\gamma^* \rightarrow \pi^+ \pi^- \pi^0 \pi^0$ |
| <sup>1</sup> From partial wave analysis of $K^+ \bar{K}^0 \pi^-$ state.       |      |   |          |  |
| <sup>2</sup> Not seen by AIHARA 88C in the $K_S^0 K^\pm \pi^\mp$ final state. |      |   |          |  |



$f_1(1510)$  mass (MeV)

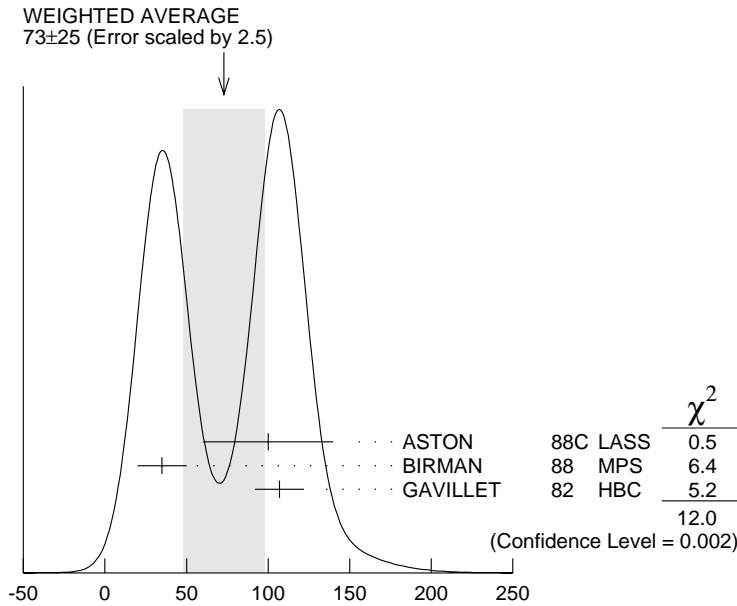
## $f_1(1510)$ WIDTH

| VALUE (MeV) | EVTS | DOCUMENT ID | TECN | COMMENT |
|-------------|------|-------------|------|---------|
|-------------|------|-------------|------|---------|

**73±25 OUR AVERAGE** Error includes scale factor of 2.5. See the ideogram below.

|        |     |                     |          |  |
|--------|-----|---------------------|----------|--|
| 100±40 |     | ASTON               | 88C LASS | 11 $K^- p \rightarrow K_S^0 K^\pm \pi^\mp \Lambda$ |
| 35±15  | 600 | <sup>3</sup> BIRMAN | 88 MPS   | 8 $\pi^- p \rightarrow K^+ \bar{K}^0 \pi^- n$      |
| 107±15 | 271 | GAVILLET            | 82 HBC   | 4.2 $K^- p \rightarrow \Lambda K K \pi$            |

<sup>3</sup> From partial wave analysis of  $K^+ \bar{K}^0 \pi^-$  state.



$f_1(1510)$  width (MeV)

## $f_1(1510)$ DECAY MODES

| Mode  | Fraction ( $\Gamma_i/\Gamma$ ) |
|---|--------------------------------|
| $\Gamma_1$ $K \bar{K}^*(892) + \text{c.c.}$ | seen                           |

## $f_1(1510)$ REFERENCES

|          |                 |                           |                             |
|----------|-----------------|---------------------------|-----------------------------|
| BAUER    | 93B PR D48 3976 | D.A. Bauer <i>et al.</i>  | (SLAC)                      |
| AIHARA   | 88C PR D38 1    | H. Aihara <i>et al.</i>   | (TPC-2 $\gamma$ Collab.)    |
| ASTON    | 88C PL B201 573 | D. Aston <i>et al.</i>    | (SLAC, NAGO, CINC, INUS) JP |
| BIRMAN   | 88 PRL 61 1557  | A. Birman <i>et al.</i>   | (BNL, FSU, IND, MASD) JP    |
| GAVILLET | 82 ZPHY C16 119 | P. Gavillet <i>et al.</i> | (CERN, CDEF, PADO+)         |

————— **OTHER RELATED PAPERS** —————

|          |     |                              |                           |                          |
|----------|-----|------------------------------|---------------------------|--------------------------|
| ABELE    | 97G | PL B415 289                  | A. Abele <i>et al.</i>    |                          |
| BARBERIS | 97C | PL B413 225                  | D. Barberis <i>et al.</i> | (WA 102 Collab.)         |
| CLOSE    | 97D | ZPHY C76 469                 | F.E. Close <i>et al.</i>  |                          |
| KING     | 91  | NP B21 11 (suppl)            | E. King <i>et al.</i>     | (FSU, BNL+)              |
| AIHARA   | 88C | PR D38 1                     | H. Aihara <i>et al.</i>   | (TPC-2 $\gamma$ Collab.) |
| BITYUKOV | 84  | SJNP 39 735                  | S. Bitjukov <i>et al.</i> | (SERP)                   |
|          |     | Translated from YAF 39 1165. |                           |                          |

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