

# h<sub>1</sub>(1415)

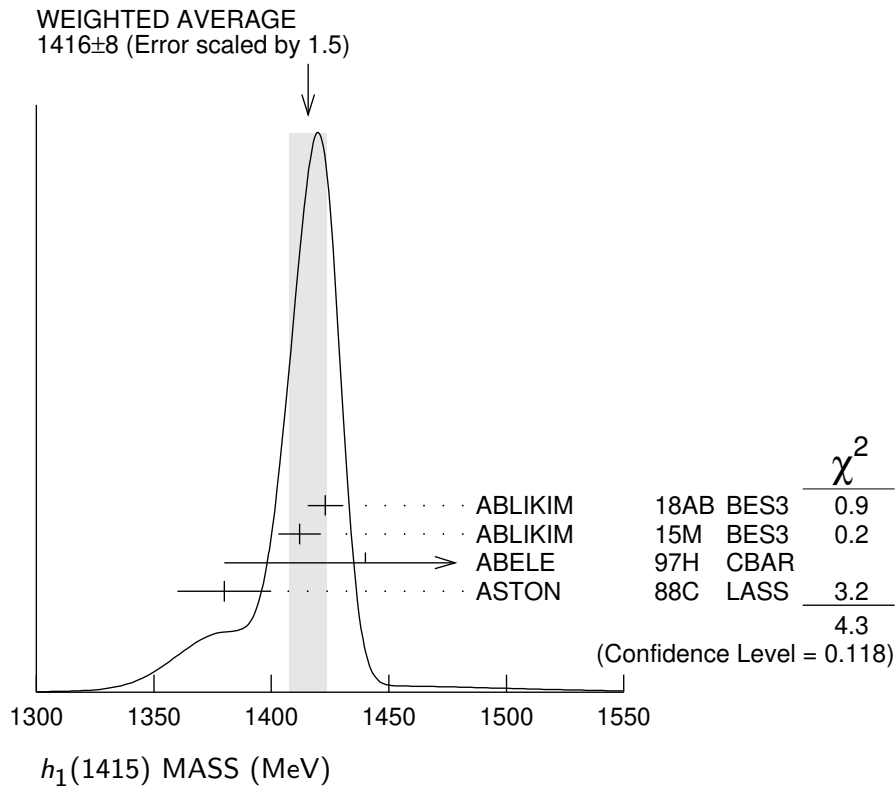
  
 was h<sub>1</sub>(1380)

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

## h<sub>1</sub>(1415) MASS

| VALUE (MeV)      | EVTS               | DOCUMENT ID                                                 | TECN      | COMMENT                                                                                     |
|------------------|--------------------|-------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------|
| <b>1416 ± 8</b>  | <b>OUR AVERAGE</b> | Error includes scale factor of 1.5. See the ideogram below. |           |                                                                                             |
| 1423 ± 2.1 ± 7.3 | 2.2k               | <sup>1</sup> ABLIKIM                                        | 18AB BES3 | J/ψ → η' h <sub>1</sub> → η' K* K̄                                                          |
| 1412 ± 4 ± 8     |                    | <sup>1</sup> ABLIKIM                                        | 15M BES3  | ψ(2S) → γχ <sub>c1,2</sub> →<br>γφ(h <sub>1</sub> → K* K̄)                                  |
| 1440 ± 60        |                    | ABELE                                                       | 97H CBAR  | p̄p → K <sub>L</sub> <sup>0</sup> K <sub>S</sub> <sup>0</sup> π <sup>0</sup> π <sup>0</sup> |
| 1380 ± 20        |                    | ASTON                                                       | 88C LASS  | 11 K <sup>-</sup> p → K <sub>S</sub> <sup>0</sup> K <sup>±</sup> π <sup>∓</sup> Λ           |

<sup>1</sup> Final states K<sup>+</sup> K<sup>-</sup> π<sup>0</sup> and K<sub>S</sub><sup>0</sup> K<sup>±</sup> π<sup>∓</sup>.



## h<sub>1</sub>(1415) WIDTH

| VALUE (MeV)       | EVTS               | DOCUMENT ID          | TECN      | COMMENT                                                                                     |
|-------------------|--------------------|----------------------|-----------|---------------------------------------------------------------------------------------------|
| <b>90 ± 15</b>    | <b>OUR AVERAGE</b> |                      |           |                                                                                             |
| 90.3 ± 9.8 ± 17.5 | 2.2k               | <sup>1</sup> ABLIKIM | 18AB BES3 | J/ψ → η' h <sub>1</sub> → η' K* K̄                                                          |
| 84 ± 12 ± 40      |                    | <sup>1</sup> ABLIKIM | 15M BES3  | ψ(2S) → γχ <sub>c1,2</sub> →<br>γφ(h <sub>1</sub> → K* K̄)                                  |
| 170 ± 80          |                    | ABELE                | 97H CBAR  | p̄p → K <sub>L</sub> <sup>0</sup> K <sub>S</sub> <sup>0</sup> π <sup>0</sup> π <sup>0</sup> |
| 80 ± 30           |                    | ASTON                | 88C LASS  | 11 K <sup>-</sup> p → K <sub>S</sub> <sup>0</sup> K <sup>±</sup> π <sup>∓</sup> Λ           |

<sup>1</sup>Final states  $K^+ K^- \pi^0$  and  $K_S^0 K^\pm \pi^\mp$ .

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## $h_1(1415)$ DECAY MODES

Mode

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$\Gamma_1$   $K \bar{K}^*(892) + \text{c.c.}$

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## $h_1(1415)$ REFERENCES

|         |                    |                          |                          |
|---------|--------------------|--------------------------|--------------------------|
| ABLIKIM | 18AB PR D98 072005 | M. Ablikim <i>et al.</i> | (BESIII Collab.)         |
| ABLIKIM | 15M PR D91 112008  | M. Ablikim <i>et al.</i> | (BESIII Collab.)         |
| ABELE   | 97H PL B415 280    | A. Abele <i>et al.</i>   | (Crystal Barrel Collab.) |
| ASTON   | 88C PL B201 573    | D. Aston <i>et al.</i>   | (SLAC, NAGO, CINC, INUS) |

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