

# $h_1(1415)$

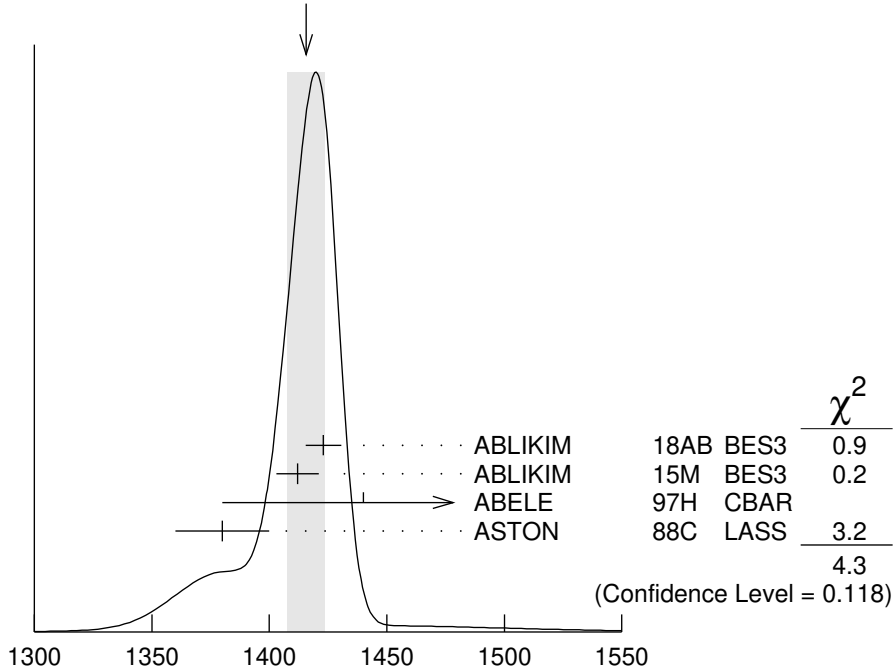
$$I^G(J^{PC}) = 0^-(1^{+-})$$

was  $h_1(1380)$

## $h_1(1415)$ 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	$J/\psi \rightarrow \eta' h_1 \rightarrow \eta' K^* \bar{K}$
1412 ± 4 ± 8		<sup>1</sup> ABLIKIM	15M BES3	$\psi(2S) \rightarrow \gamma \chi_{c1,2} \rightarrow$ $\gamma \phi (h_1 \rightarrow K^* \bar{K})$
1440 ± 60		ABELE	97H CBAR	$\bar{p} p \rightarrow K_L^0 K_S^0 \pi^0 \pi^0$
1380 ± 20		ASTON	88C LASS	11 $K^- p \rightarrow K_S^0 K^\pm \pi^\mp \Lambda$

WEIGHTED AVERAGE  
1416 ± 8 (Error scaled by 1.5)



<sup>1</sup> Final states  $K^+ K^- \pi^0$  and  $K_S^0 K^\pm \pi^\mp$ .  
 $h_1(1415)$  MASS (MeV)

## $h_1(1415)$ 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	$J/\psi \rightarrow \eta' h_1 \rightarrow \eta' K^* \bar{K}$
84 ± 12 ± 40		<sup>1</sup> ABLIKIM	15M BES3	$\psi(2S) \rightarrow \gamma \chi_{c1,2} \rightarrow$ $\gamma \phi (h_1 \rightarrow K^* \bar{K})$

170  $\pm$  80                      ABELE                      97H CBAR  $\bar{p}p \rightarrow K_L^0 K_S^0 \pi^0 \pi^0$   
 80  $\pm$  30                      ASTON                      88C LASS 11  $K^- p \rightarrow K_S^0 K^\pm \pi^\mp \Lambda$   
<sup>1</sup> Final states  $K^+ K^- \pi^0$  and  $K_S^0 K^\pm \pi^\mp$ .

## $h_1(1415)$ DECAY MODES

Mode

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

## $h_1(1415)$ 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)