

$\psi(3770)$

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

### $\psi(3770)$ MASS

OUR FIT includes measurements of  $m_{\psi}(2S)$ ,  $m_{\psi}(3770)$ , and  $m_{\psi}(3770) - m_{\psi}(2S)$ .

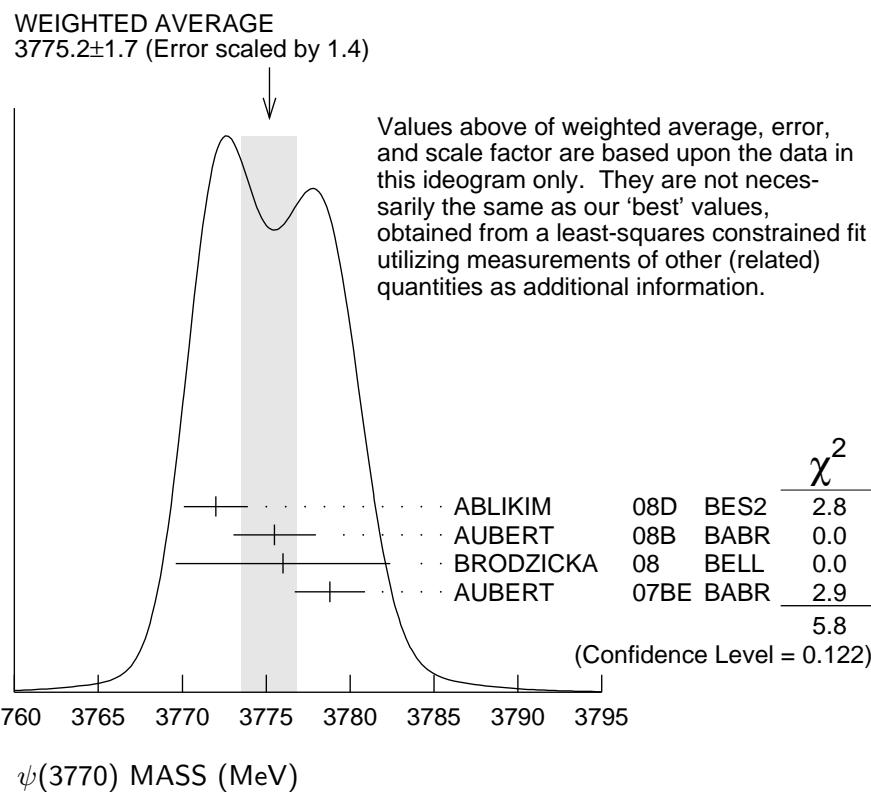
VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
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**3772.92±0.35 OUR FIT** Error includes scale factor of 1.1.

**3775.2 ±1.7 OUR AVERAGE** Error includes scale factor of 1.4. See the ideogram below.

3772.0	±1.9	1	ABLIKIM	08D	BES2	$e^+ e^- \rightarrow$ hadrons
3775.5	±2.4	57	AUBERT	08B	BABR	$B \rightarrow D\bar{D}K$
3776	±5	68	BRODZICKA	08	BELL	$B^+ \rightarrow D^0\bar{D}^0 K^+$
3778.8	±1.9	±0.9	AUBERT	07BE	BABR	$e^+ e^- \rightarrow D\bar{D}\gamma$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
3778.4	±3.0	±1.3	34	CHISTOV	04	BELL Sup. by BRODZICKA 08

<sup>1</sup> Reanalysis of data presented in BAI 02C. From a global fit over the center-of-mass energy region 3.7–5.0 GeV covering the  $\psi(3770)$ ,  $\psi(4040)$ ,  $\psi(4160)$ , and  $\psi(4415)$  resonances. Phase angle fixed in the fit to  $\delta = 0^\circ$ .



### $m_{\psi(3770)} - m_{\psi(2S)}$

OUR FIT includes measurements of  $m_{\psi(2S)}$ ,  $m_{\psi(3770)}$ , and  $m_{\psi(3770)} - m_{\psi(2S)}$ .

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
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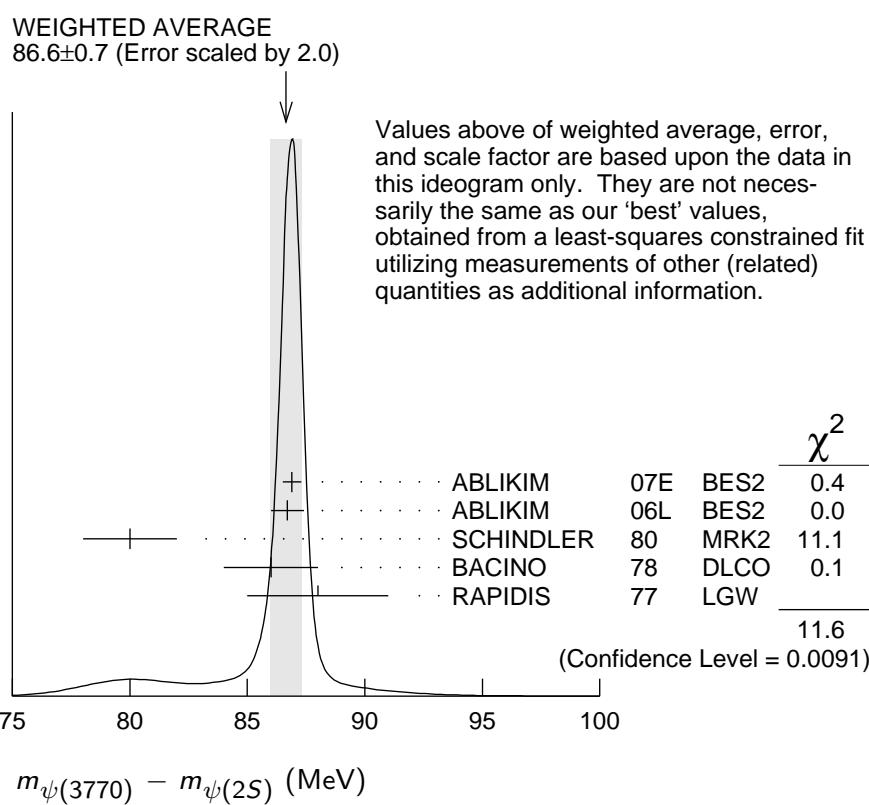
**86.83±0.35 OUR FIT** Error includes scale factor of 1.1.

**86.6 ± 0.7 OUR AVERAGE** Error includes scale factor of 2.0. See the ideogram below.

86.9 ± 0.4	2 ABLIKIM	07E BES2	$e^+ e^- \rightarrow$ hadrons
86.7 ± 0.7	ABLIKIM	06L BES2	$e^+ e^- \rightarrow$ hadrons
80 ± 2	SCHINDLER	80 MRK2	$e^+ e^-$
86 ± 2	3 BACINO	78 DLCO	$e^+ e^-$
88 ± 3	RAPIDIS	77 LGW	$e^+ e^-$

<sup>2</sup> BES-II  $\psi(2S)$  mass subtracted (see ABLIKIM 06L).

<sup>3</sup> SPEAR  $\psi(2S)$  mass subtracted (see SCHINDLER 80).



### $\psi(3770)$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
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**27.3± 1.0 OUR FIT**

**27.6± 1.0 OUR AVERAGE**

30.4± 8.5	4 ABLIKIM	08D BES2	$e^+ e^- \rightarrow$ hadrons
27 ± 10 ± 5	68 BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
28.5± 1.2±0.2	ABLIKIM	07E BES2	$e^+ e^- \rightarrow$ hadrons
23.5± 3.7±0.9	AUBERT	07BE BABR	$e^+ e^- \rightarrow D \bar{D} \gamma$

$26.9 \pm 2.4 \pm 0.3$	ABLIKIM	06L	BES2	$e^+ e^- \rightarrow \text{hadrons}$
$24 \pm 5$	SCHINDLER	80	MRK2	$e^+ e^-$
$24 \pm 5$	BACINO	78	DLC	$e^+ e^-$
$28 \pm 5$	RAPIDIS	77	LGW	$e^+ e^-$

<sup>4</sup> Reanalysis of data presented in BAI 02C. From a global fit over the center-of-mass energy region 3.7–5.0 GeV covering the  $\psi(3770)$ ,  $\psi(4040)$ ,  $\psi(4160)$ , and  $\psi(4415)$  resonances. Phase angle fixed in the fit to  $\delta = 0^\circ$ .

## $\psi(3770)$ DECAY MODES

In addition to the dominant decay mode to  $D\bar{D}$ ,  $\psi(3770)$  was found to decay into the final states containing the  $J/\psi$  (BAI 05, ADAM 06).

ADAMS 06 and HUANG 06A searched for various decay modes with light hadrons and found a statistically significant signal for the decay to  $\phi\eta$  only (ADAMS 06).

Mode	Fraction ( $\Gamma_i/\Gamma$ )	Scale factor/ Confidence level
$\Gamma_1 D\bar{D}$	(85.3 $\pm 3.2$ ) %	
$\Gamma_2 D^0\bar{D}^0$	(48.7 $\pm 3.2$ ) %	
$\Gamma_3 D^+D^-$	(36.1 $\pm 2.8$ ) %	
$\Gamma_4 J/\psi\pi^+\pi^-$	( 1.93 $\pm 0.28$ ) $\times 10^{-3}$	
$\Gamma_5 J/\psi\pi^0\pi^0$	( 8.0 $\pm 3.0$ ) $\times 10^{-4}$	
$\Gamma_6 J/\psi\eta$	( 9 $\pm 4$ ) $\times 10^{-4}$	
$\Gamma_7 J/\psi\pi^0$	< 2.8 $\times 10^{-4}$	CL=90%
$\Gamma_8 \gamma\chi_{c0}$	( 7.3 $\pm 0.9$ ) $\times 10^{-3}$	
$\Gamma_9 \gamma\chi_{c1}$	( 2.9 $\pm 0.6$ ) $\times 10^{-3}$	
$\Gamma_{10} \gamma\chi_{c2}$	< 9 $\times 10^{-4}$	CL=90%
$\Gamma_{11} e^+e^-$	( 9.7 $\pm 0.7$ ) $\times 10^{-6}$	S=1.2
$\Gamma_{12} K_S^0 K_L^0$	< 1.2 $\times 10^{-5}$	CL=90%
$\Gamma_{13} 2(\pi^+\pi^-)$	< 1.12 $\times 10^{-3}$	CL=90%
$\Gamma_{14} 2(\pi^+\pi^-)\pi^0$	< 1.06 $\times 10^{-3}$	CL=90%
$\Gamma_{15} 2(\pi^+\pi^-\pi^0)$	< 5.85 %	CL=90%
$\Gamma_{16} \omega\pi^+\pi^-$	< 6.0 $\times 10^{-4}$	CL=90%
$\Gamma_{17} 3(\pi^+\pi^-)$	< 9.1 $\times 10^{-3}$	
$\Gamma_{18} 3(\pi^+\pi^-)\pi^0$	< 1.37 %	
$\Gamma_{19} 3(\pi^+\pi^-)2\pi^0$	< 11.74 %	CL=90%
$\Gamma_{20} \eta\pi^+\pi^-$	< 1.24 $\times 10^{-3}$	CL=90%
$\Gamma_{21} \pi^+\pi^-2\pi^0$	< 8.9 $\times 10^{-3}$	CL=90%
$\Gamma_{22} \rho^0\pi^+\pi^-$	< 6.9 $\times 10^{-3}$	CL=90%
$\Gamma_{23} \eta3\pi$	< 1.34 $\times 10^{-3}$	CL=90%
$\Gamma_{24} \eta2(\pi^+\pi^-)$	< 2.43 %	
$\Gamma_{25} \eta'3\pi$	< 2.44 $\times 10^{-3}$	CL=90%
$\Gamma_{26} K^+K^-\pi^+\pi^-$	< 9.0 $\times 10^{-4}$	CL=90%
$\Gamma_{27} \phi\pi^+\pi^-$	< 4.1 $\times 10^{-4}$	CL=90%
$\Gamma_{28} K^+K^-2\pi^0$	< 4.2 $\times 10^{-3}$	CL=90%
$\Gamma_{29} \phi\pi^0$	not seen	

$\Gamma_{30}$	$\phi\eta$	$(3.1 \pm 0.7) \times 10^{-4}$	
$\Gamma_{31}$	$4(\pi^+\pi^-)$	< 1.67 %	CL=90%
$\Gamma_{32}$	$4(\pi^+\pi^-)\pi^0$	< 3.06 %	CL=90%
$\Gamma_{33}$	$\phi f_0(980)$	< 4.5 $\times 10^{-4}$	CL=90%
$\Gamma_{34}$	$K^+K^-\pi^+\pi^-\pi^0$	< 2.36 $\times 10^{-3}$	CL=90%
$\Gamma_{35}$	$K^+K^-\rho^0\pi^0$	< 8 $\times 10^{-4}$	CL=90%
$\Gamma_{36}$	$K^+K^-\rho^+\pi^-$	< 1.46 %	CL=90%
$\Gamma_{37}$	$\omega K^+K^-$	< 3.4 $\times 10^{-4}$	CL=90%
$\Gamma_{38}$	$\phi\pi^+\pi^-\pi^0$	< 3.8 $\times 10^{-3}$	CL=90%
$\Gamma_{39}$	$K^{*0}K^-\pi^+\pi^0 + \text{c.c.}$	< 1.62 %	CL=90%
$\Gamma_{40}$	$K^{*+}K^-\pi^+\pi^- + \text{c.c.}$	< 3.23 %	CL=90%
$\Gamma_{41}$	$K^+K^-\pi^+\pi^-2\pi^0$	< 2.67 %	CL=90%
$\Gamma_{42}$	$K^+K^-2(\pi^+\pi^-)$	< 1.03 %	CL=90%
$\Gamma_{43}$	$K^+K^-2(\pi^+\pi^-)\pi^0$	< 3.60 %	CL=90%
$\Gamma_{44}$	$\eta K^+K^-$	< 4.1 $\times 10^{-4}$	CL=90%
$\Gamma_{45}$	$\rho^0 K^+K^-$	< 5.0 $\times 10^{-3}$	CL=90%
$\Gamma_{46}$	$2(K^+K^-)$	< 6.0 $\times 10^{-4}$	CL=90%
$\Gamma_{47}$	$\phi K^+K^-$	< 7.5 $\times 10^{-4}$	CL=90%
$\Gamma_{48}$	$2(K^+K^-)\pi^0$	< 2.9 $\times 10^{-4}$	CL=90%
$\Gamma_{49}$	$2(K^+K^-)\pi^+\pi^-$	< 3.2 $\times 10^{-3}$	CL=90%
$\Gamma_{50}$	$K_S^0 K^-\pi^+$	< 3.2 $\times 10^{-3}$	CL=90%
$\Gamma_{51}$	$K_S^0 K^-\pi^+\pi^0$	< 1.33 %	CL=90%
$\Gamma_{52}$	$K_S^0 K^-2\pi^+\pi^-$	< 8.7 $\times 10^{-3}$	CL=90%
$\Gamma_{53}$	$K_S^0 K^-2\pi^+\pi^-\pi^0$	< 4.18 %	CL=90%
$\Gamma_{54}$	$K_S^0 K^-\pi^+2(\pi^+\pi^-)$	< 1.22 %	CL=90%
$\Gamma_{55}$	$K_S^0 K^-\pi^+2\pi^0$	< 2.65 %	CL=90%
$\Gamma_{56}$	$K^{*0}K^-\pi^++\text{c.c.}$	< 9.7 $\times 10^{-3}$	CL=90%
$\Gamma_{57}$	$p\bar{p}\pi^0$	< 1.2 $\times 10^{-3}$	
$\Gamma_{58}$	$p\bar{p}\pi^+\pi^-$	< 5.8 $\times 10^{-4}$	CL=90%
$\Gamma_{59}$	$\Lambda\bar{\Lambda}$	< 1.2 $\times 10^{-4}$	CL=90%
$\Gamma_{60}$	$p\bar{p}\pi^+\pi^-\pi^0$	< 1.85 $\times 10^{-3}$	CL=90%
$\Gamma_{61}$	$\omega p\bar{p}$	< 2.9 $\times 10^{-4}$	CL=90%
$\Gamma_{62}$	$\Lambda\bar{\Lambda}\pi^0$	< 1.2 $\times 10^{-3}$	CL=90%
$\Gamma_{63}$	$p\bar{p}2(\pi^+\pi^-)$	< 2.6 $\times 10^{-3}$	CL=90%
$\Gamma_{64}$	$\eta p\bar{p}$	< 5.4 $\times 10^{-4}$	CL=90%
$\Gamma_{65}$	$\rho^0 p\bar{p}$	< 1.7 $\times 10^{-3}$	CL=90%
$\Gamma_{66}$	$p\bar{p}K^+K^-$	< 3.2 $\times 10^{-4}$	CL=90%
$\Gamma_{67}$	$\phi p\bar{p}$	< 1.3 $\times 10^{-4}$	CL=90%
$\Gamma_{68}$	$\Lambda\bar{\Lambda}\pi^+\pi^-$	< 2.5 $\times 10^{-4}$	CL=90%
$\Gamma_{69}$	$\Lambda\bar{p}K^+$	< 2.8 $\times 10^{-4}$	CL=90%
$\Gamma_{70}$	$\Lambda\bar{p}K^+\pi^+\pi^-$	< 6.3 $\times 10^{-4}$	CL=90%
$\Gamma_{71}$	$\pi^+\pi^-\pi^0$	not seen	
$\Gamma_{72}$	$\rho\pi$	not seen	
$\Gamma_{73}$	$\omega\pi^0$	not seen	

$\Gamma_{74}$	$\rho\eta$	not seen
$\Gamma_{75}$	$\omega\eta$	not seen
$\Gamma_{76}$	$\rho\eta'$	not seen
$\Gamma_{77}$	$\omega\eta'$	not seen
$\Gamma_{78}$	$\phi\eta'$	not seen
$\Gamma_{79}$	$K^{*0}\bar{K}^0$	not seen
$\Gamma_{80}$	$K^{*+}K^-$	not seen
$\Gamma_{81}$	$b_1\pi$	not seen

### $\psi(3770)$ PARTIAL WIDTHS

#### $\Gamma(e^+e^-)$

#### $\Gamma_{11}$

<u>VALUE</u> (keV)	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.265±0.018 OUR FIT</b>		Error includes scale factor of 1.3.		
<b>0.259±0.016 OUR AVERAGE</b>		Error includes scale factor of 1.2.		
0.22 ± 0.05	5	ABLIKIM	08D BES2	$e^+e^- \rightarrow$ hadrons
0.277±0.011±0.013		ABLIKIM	07E BES2	$e^+e^- \rightarrow$ hadrons
0.204±0.003 <sup>+0.041</sup> <sub>-0.027</sub>	1.427M	6 BESSON	06 CLEO	$e^+e^- \rightarrow$ hadrons
0.276±0.050		SCHINDLER	80 MRK2	$e^+e^-$
0.18 ± 0.06		BACINO	78 DLCO	$e^+e^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.37 ± 0.09	7	RAPIDIS	77 LGW	$e^+e^-$

<sup>5</sup> Reanalysis of data presented in BAI 02C. From a global fit over the center-of-mass energy region 3.7–5.0 GeV covering the  $\psi(3770)$ ,  $\psi(4040)$ ,  $\psi(4160)$ , and  $\psi(4415)$  resonances. Phase angle fixed in the fit to  $\delta = 0^\circ$ .

<sup>6</sup> BESSON 06 measure  $\sigma(e^+e^- \rightarrow \psi(3770) \rightarrow \text{hadrons}) = 6.38 \pm 0.08^{+0.41}_{-0.30}$  nb at  $\sqrt{s} = 3773 \pm 1$  MeV, and obtain  $\Gamma_{ee}$  from the Born-level cross section calculated using  $\psi(3770)$  mass and width from our 2004 edition.

<sup>7</sup> See also  $\Gamma(e^+e^-)/\Gamma_{\text{total}}$  below.

### $\psi(3770)$ BRANCHING RATIOS

#### $\Gamma(D\bar{D})/\Gamma_{\text{total}}$

#### $\Gamma_1/\Gamma$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.853±0.032 OUR AVERAGE</b>			
0.849±0.056±0.018	8 ABLIKIM	08B BES2	$e^+e^- \rightarrow$ non- $D\bar{D}$
0.866±0.050±0.036	9 ABLIKIM	07K BES2	$e^+e^- \rightarrow$ non- $D\bar{D}$
0.836±0.073±0.042	ABLIKIM	06L BES2	$e^+e^- \rightarrow D\bar{D}$
0.855±0.017±0.058	10 ABLIKIM	06N BES2	$e^+e^- \rightarrow D\bar{D}$

#### $\Gamma(D^0\bar{D}^0)/\Gamma_{\text{total}}$

#### $\Gamma_2/\Gamma$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.487±0.032 OUR AVERAGE</b>			
0.467±0.047±0.023	ABLIKIM	06L BES2	$e^+e^- \rightarrow D^0\bar{D}^0$
0.499±0.013±0.038	10 ABLIKIM	06N BES2	$e^+e^- \rightarrow D^0\bar{D}^0$

$$\Gamma(D^+ D^-)/\Gamma_{\text{total}} \quad \Gamma_3/\Gamma$$

VALUE	DOCUMENT ID	TECN	COMMENT
<b><math>0.361 \pm 0.028</math> OUR AVERAGE</b>			
$0.369 \pm 0.037 \pm 0.028$	ABLIKIM	06L BES2	$e^+ e^- \rightarrow D^+ D^-$
$0.357 \pm 0.011 \pm 0.034$	<sup>10</sup> ABLIKIM	06N BES2	$e^+ e^- \rightarrow D^+ D^-$

$\Gamma(D^0\bar{D}^0)/\Gamma(D^+D^-)$	$\Gamma_2/\Gamma_3$			
Value	EVTS	Document ID	TECN	Comment
<b><math>1.260 \pm 0.021</math> OUR AVERAGE</b>				
1.39 $\pm 0.31$ $\pm 0.12$		PAKHLOVA	08	BELL $e^+ e^- \rightarrow D\bar{D}\gamma$
1.78 $\pm 0.33$ $\pm 0.24$		AUBERT	07BE	BABR $e^+ e^- \rightarrow D\bar{D}\gamma$
1.258 $\pm 0.016$ $\pm 0.014$		DOBBS	07	CLEO $e^+ e^- \rightarrow D\bar{D}$
1.27 $\pm 0.12$ $\pm 0.08$		ABLIKIM	06L	BES2 $e^+ e^- \rightarrow D\bar{D}$
2.43 $\pm 1.50$ $\pm 0.43$	34	11 CHISTOV	04	BELL $B^+ \rightarrow \psi(3770) K^+$

$\Gamma(J/\psi\pi^+\pi^-)/\Gamma_{\text{total}}$					$\Gamma_4/\Gamma$
VALUE (units $10^{-3}$ )	EVTS	DOCUMENT ID	TECN	COMMENT	
<b><math>1.93 \pm 0.28</math> OUR AVERAGE</b>					
$1.89 \pm 0.20 \pm 0.20$	$231 \pm 33$	ADAM	06	CLEO	$e^+ e^- \rightarrow \psi(3770)$
$3.4 \pm 1.4 \pm 0.9$	$17.8 \pm 4.8$	BAI	05	BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(J/\psi\pi^0\pi^0)/\Gamma_{\text{total}}$	$\Gamma_5/\Gamma$			
VALUE (units $10^{-2}$ )	EVTS	DOCUMENT ID	TECN	COMMENT
<b>0.080 <math>\pm</math> 0.025 <math>\pm</math> 0.016</b>	39 + 14	ADAM	06	CLEO $e^+ e^- \rightarrow \psi(3770)$

$\Gamma(J/\psi\eta)/\Gamma_{\text{total}}$	$EVTS$	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>	$\Gamma_6/\Gamma$
$87 \pm 33 \pm 22$	$22 \pm 10$	ADAM	06	CLEO	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(J/\psi\pi^0)/\Gamma_{\text{total}}$	$\Gamma_7/\Gamma$				
<i>VALUE</i> (units $10^{-5}$ )	<i>CL%</i>	<i>EVTS</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<28	90	<10	ADAM	06	CLEO $e^+e^- \rightarrow J/\psi(3770)$

$\Gamma(\gamma\chi_{c0})/\Gamma_{\text{total}}$	$\Gamma_8/\Gamma$				
VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<b>7.3±0.7±0.6</b>		274 ± 27	12 BRIERE	06 CLEO	$e^+ e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$

• • • We do not use the following data for averages, fits, limits, etc. • • •

$< 44$       90       $^{13}$  COAN      06A CLEO       $e^+ e^- \rightarrow \psi(3770) \rightarrow \gamma \gamma J/\psi$

$$\Gamma(\gamma\chi_{c1})/\Gamma_{\text{total}} \quad \Gamma_9/\Gamma$$

<i>VALUE</i> (units $10^{-3}$ )	<i>EVTS</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<b><math>2.9 \pm 0.5 \pm 0.4</math></b>	14	BRIERE	06	CLEO $e^+ e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}, \gamma\gamma J/\psi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				

- • • We do not use the following data for averages, fits, limits, etc. • • •

$3.9 \pm 1.4 \pm 0.6$	$54 \pm 17$	$^{15}_{\text{BRIERE}}$	06 CLEO	$e^+ e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$
$2.8 \pm 0.5 \pm 0.4$	$53 \pm 10$	$^{13}_{\text{COAN}}$	06A CLEO	$e^+ e^- \rightarrow \psi(3770) \rightarrow \gamma \gamma / \chi \chi$

$\Gamma(\gamma\chi_{c1})/\Gamma(J/\psi\pi^+\pi^-)$ 

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>1.49±0.31±0.26</b>	53 ± 10	16 COAN	06A CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

 $\Gamma_9/\Gamma_4$  $\Gamma(\gamma\chi_{c0})/\Gamma(\gamma\chi_{c1})$ 

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •			
2.5±0.6	17 BRIERE	06 CLEO	$e^+e^- \rightarrow \psi(3770)$

 $\Gamma_8/\Gamma_9$  $\Gamma(\gamma\chi_{c2})/\Gamma_{\text{total}}$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<0.9	90	13 COAN	06A CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<2.0	90	18 BRIERE	06 CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$

 $\Gamma_{10}/\Gamma$  $\Gamma(\gamma\chi_{c0})/\Gamma(\gamma\chi_{c2})$ 

<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •				
>8	90	17 BRIERE	06 CLEO	$e^+e^- \rightarrow \psi(3770)$

 $\Gamma_8/\Gamma_{10}$  $\Gamma(e^+e^-)/\Gamma_{\text{total}}$ 

<u>VALUE (units <math>10^{-5}</math>)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.97±0.07 OUR FIT</b>	Error includes scale factor of 1.2.		
<b>1.3 ±0.2</b>	RAPIDIS	77 LGW	$e^+e^-$

 $\Gamma_{11}/\Gamma$  $\Gamma(K_S^0 K_L^0)/\Gamma_{\text{total}}$ 

<u>VALUE (units <math>10^{-5}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
< 1.2	90	19 CRONIN-HEN..06	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<21	90	20 ABLIKIM	04F BES	$e^+e^- \rightarrow \psi(3770)$

 $\Gamma_{12}/\Gamma$  $\Gamma(2(\pi^+\pi^-))/\Gamma_{\text{total}}$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<11.2	90	21 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<48	22,23 ABLIKIM	07B BES2	$e^+e^- \rightarrow \psi(3770)$	

 $\Gamma_{13}/\Gamma$  $\Gamma(2(\pi^+\pi^-)\pi^0)/\Gamma_{\text{total}}$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<10.6	90	21 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<62	22,23 ABLIKIM	07B BES2	$e^+e^- \rightarrow \psi(3770)$	

 $\Gamma_{14}/\Gamma$

$\Gamma(2(\pi^+\pi^-\pi^0))/\Gamma_{\text{total}}$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>
<b>&lt;58.5</b>	90	305

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma_{15}/\Gamma$ 

|

 $\Gamma(\omega\pi^+\pi^-)/\Gamma_{\text{total}}$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>
<b>&lt; 6.0</b>	90

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<b>&lt;55</b>	90	24 ABLIKIM	07I BES2	3.77 $e^+ e^-$
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 $\Gamma(3(\pi^+\pi^-))/\Gamma_{\text{total}}$  $\Gamma_{17}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>
<b>&lt;91</b>

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(3(\pi^+\pi^-)\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{18}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>
<b>&lt;137</b>

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(3(\pi^+\pi^-)2\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{19}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>
<b>&lt;117.4</b>	90	59

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\eta\pi^+\pi^-)/\Gamma_{\text{total}}$  $\Gamma_{20}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>
<b>&lt;12.4</b>	90

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\pi^+\pi^-2\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{21}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>
<b>&lt;8.9</b>	90	218

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\rho^0\pi^+\pi^-)/\Gamma_{\text{total}}$  $\Gamma_{22}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>
<b>&lt;6.9</b>	90

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\eta 3\pi)/\Gamma_{\text{total}}$  $\Gamma_{23}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>
<b>&lt;13.4</b>	90

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\eta 2(\pi^+\pi^-))/\Gamma_{\text{total}}$  $\Gamma_{24}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>
<b>&lt;243</b>

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\eta' 3\pi)/\Gamma_{\text{total}}$  $\Gamma_{25}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>
<b>&lt;24.4</b>	90

<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K^+ K^- \pi^+ \pi^-)/\Gamma_{\text{total}}$   $\Gamma_{26}/\Gamma$

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
< 9.0	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<48		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(\phi \pi^+ \pi^-)/\Gamma_{\text{total}}$   $\Gamma_{27}/\Gamma$

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
< 4.1	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<16		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K^+ K^- 2\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{28}/\Gamma$

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<4.2	90	14	ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(\phi \pi^0)/\Gamma_{\text{total}}$   $\Gamma_{29}/\Gamma$

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<5	22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(\phi \eta)/\Gamma_{\text{total}}$   $\Gamma_{30}/\Gamma$

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<b>3.1±0.6±0.3</b>	25 ADAMS	06 CLEO	$3.773 e^+ e^- \rightarrow \phi \eta$	
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<19	22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$	

$\Gamma(4(\pi^+ \pi^-))/\Gamma_{\text{total}}$   $\Gamma_{31}/\Gamma$

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<16.7	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(4(\pi^+ \pi^-)\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{32}/\Gamma$

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<30.6	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(\phi f_0(980))/\Gamma_{\text{total}}$   $\Gamma_{33}/\Gamma$

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<4.5	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K^+ K^- \pi^+ \pi^- \pi^0)/\Gamma_{\text{total}}$   $\Gamma_{34}/\Gamma$

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
< 23.6	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<111		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K^+ K^- \rho^0 \pi^0)/\Gamma_{\text{total}}$				$\Gamma_{35}/\Gamma$
<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;8</b>	90	24 ABLIKIM	07I	BES2 3.77 $e^+ e^-$
$\Gamma(K^+ K^- \rho^+ \pi^-)/\Gamma_{\text{total}}$				$\Gamma_{36}/\Gamma$
<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;146</b>	90	24 ABLIKIM	07I	BES2 3.77 $e^+ e^-$
$\Gamma(\omega K^+ K^-)/\Gamma_{\text{total}}$				$\Gamma_{37}/\Gamma$
<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt; 3.4</b>	90	21 HUANG	06A	CLEO $e^+ e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<b>&lt;66</b>	90	24 ABLIKIM	07I	BES2 3.77 $e^+ e^-$
$\Gamma(\phi \pi^+ \pi^- \pi^0)/\Gamma_{\text{total}}$				$\Gamma_{38}/\Gamma$
<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;38</b>	90	24 ABLIKIM	07I	BES2 3.77 $e^+ e^-$
$\Gamma(K^{*0} K^- \pi^+ \pi^0 + \text{c.c.})/\Gamma_{\text{total}}$				$\Gamma_{39}/\Gamma$
<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;162</b>	90	24 ABLIKIM	07I	BES2 3.77 $e^+ e^-$
$\Gamma(K^{*+} K^- \pi^+ \pi^- + \text{c.c.})/\Gamma_{\text{total}}$				$\Gamma_{40}/\Gamma$
<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;323</b>	90	24 ABLIKIM	07I	BES2 3.77 $e^+ e^-$
$\Gamma(K^+ K^- \pi^+ \pi^- 2\pi^0)/\Gamma_{\text{total}}$				$\Gamma_{41}/\Gamma$
<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;26.7</b>	90	24 ABLIKIM	08N	BES2 $e^+ e^- \rightarrow \psi(3770)$
$\Gamma(K^+ K^- 2(\pi^+ \pi^-))/\Gamma_{\text{total}}$				$\Gamma_{42}/\Gamma$
<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;10.3</b>	90	22,23 ABLIKIM	07F	BES2 $e^+ e^- \rightarrow \psi(3770)$
$\Gamma(K^+ K^- 2(\pi^+ \pi^-)\pi^0)/\Gamma_{\text{total}}$				$\Gamma_{43}/\Gamma$
<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;36.0</b>	90	22,23 ABLIKIM	07F	BES2 $e^+ e^- \rightarrow \psi(3770)$
$\Gamma(\eta K^+ K^-)/\Gamma_{\text{total}}$				$\Gamma_{44}/\Gamma$
<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;4.1</b>	90	21 HUANG	06A	CLEO $e^+ e^- \rightarrow \psi(3770)$
$\Gamma(\rho^0 K^+ K^-)/\Gamma_{\text{total}}$				$\Gamma_{45}/\Gamma$
<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;5.0</b>	90	22,23 ABLIKIM	07F	BES2 $e^+ e^- \rightarrow \psi(3770)$

$\Gamma(2(K^+ K^-))/\Gamma_{\text{total}}$  $\Gamma_{46}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
< 6.0	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<17		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\phi K^+ K^-)/\Gamma_{\text{total}}$  $\Gamma_{47}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
< 7.5	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<24		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(2(K^+ K^-)\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{48}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
< 2.9	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<46		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(2(K^+ K^-)\pi^+\pi^-)/\Gamma_{\text{total}}$  $\Gamma_{49}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<3.2	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(K_S^0 K^- \pi^+)/\Gamma_{\text{total}}$  $\Gamma_{50}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<3.2	90	18	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(K_S^0 K^- \pi^+ \pi^0)/\Gamma_{\text{total}}$  $\Gamma_{51}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<13.3	90	40	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(K_S^0 K^- 2\pi^+ \pi^-)/\Gamma_{\text{total}}$  $\Gamma_{52}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<8.7	90	39	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(K_S^0 K^- 2\pi^+ \pi^- \pi^0)/\Gamma_{\text{total}}$  $\Gamma_{53}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<41.8	90	23	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(K_S^0 K^- \pi^+ 2(\pi^+ \pi^-))/\Gamma_{\text{total}}$  $\Gamma_{54}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<12.2	90	4	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(K_S^0 K^- \pi^+ 2\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{55}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<26.5	90	17	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K^{*0} K^- \pi^+ + \text{c.c.})/\Gamma_{\text{total}}$  $\Gamma_{56}/\Gamma$ 

<i>VALUE</i> (units $10^{-3}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<9.7	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(p\bar{p}\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{57}/\Gamma$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<12	22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(p\bar{p}\pi^+\pi^-)/\Gamma_{\text{total}}$  $\Gamma_{58}/\Gamma$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
< 5.8	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<16	22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(\Lambda\bar{\Lambda})/\Gamma_{\text{total}}$  $\Gamma_{59}/\Gamma$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<1.2	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<4	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(p\bar{p}\pi^+\pi^-\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{60}/\Gamma$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<18.5	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<73	22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(\omega p\bar{p})/\Gamma_{\text{total}}$  $\Gamma_{61}/\Gamma$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
< 2.9	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<30	90	24 ABLIKIM	07I BES2	3.77 $e^+ e^-$
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 $\Gamma(\Lambda\bar{\Lambda}\pi^0)/\Gamma_{\text{total}}$  $\Gamma_{62}/\Gamma$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<12	90	24 ABLIKIM	07I BES2	3.77 $e^+ e^-$

 $\Gamma(p\bar{p}2(\pi^+\pi^-))/\Gamma_{\text{total}}$  $\Gamma_{63}/\Gamma$ 

<i>VALUE</i> (units $10^{-3}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<2.6	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma(\eta p\bar{p})/\Gamma_{\text{total}}$  $\Gamma_{64}/\Gamma$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<5.4	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

$\Gamma(\rho^0 p\bar{p})/\Gamma_{\text{total}}$ 

<i>VALUE</i> (units $10^{-3}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<1.7	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma_{65}/\Gamma$  $\Gamma(p\bar{p}K^+K^-)/\Gamma_{\text{total}}$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
< 3.2	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<11		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma_{66}/\Gamma$  $\Gamma(\phi p\bar{p})/\Gamma_{\text{total}}$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<1.3	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<9		22,23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma_{67}/\Gamma$  $\Gamma(\Lambda\bar{\Lambda}\pi^+\pi^-)/\Gamma_{\text{total}}$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
< 2.5	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
$\bullet \bullet \bullet$ We do not use the following data for averages, fits, limits, etc. $\bullet \bullet \bullet$				
<39	90	22,23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma_{68}/\Gamma$  $\Gamma(\Lambda\bar{p}K^+)/\Gamma_{\text{total}}$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<2.8	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma_{69}/\Gamma$  $\Gamma(\Lambda\bar{p}K^+\pi^+\pi^-)/\Gamma_{\text{total}}$ 

<i>VALUE</i> (units $10^{-4}$ )	<i>CL%</i>	<i>DOCUMENT ID</i>	<i>TECN</i>	<i>COMMENT</i>
<6.3	90	21 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

 $\Gamma_{70}/\Gamma$ 

8 Neglecting interference.

9 Using  $\sigma^{obs} = 7.07 \pm 0.58$  nb and neglecting interference.10 From a measurement of  $\sigma(e^+e^- \rightarrow D\bar{D})$  at  $\sqrt{s} = 3773$  MeV, using the  $\psi(3770)$  resonance parameters measured by ABLIKIM 06L.

11 See ADLER 88C for older measurements of this quantity.

12 Uses  $B(\psi(2S) \rightarrow \gamma\chi_{c0}) = 9.33 \pm 0.14 \pm 0.61$  % from ATHAR 04,  $\psi(2S)$  mass and width from PDG 04, and  $\Gamma_{ee}(\psi(2S)) = 2.54 \pm 0.03 \pm 0.11$  keV from ADAM 06.13 Using  $\Gamma_{ee}(\psi(2S)) = (2.54 \pm 0.03 \pm 0.11)$  keV from ADAM 06 and taking  $\sigma(e^+e^- \rightarrow D\bar{D})$  from HE 05 for  $\sigma(e^+e^- \rightarrow \psi(3770))$ .

14 Averages the two measurements from COAN 06A and BRIERE 06.

15 Uses  $B(\psi(2S) \rightarrow \gamma\chi_{c1}) = 9.07 \pm 0.11 \pm 0.54$  % from ATHAR 04,  $\psi(2S)$  mass and width from PDG 04, and  $\Gamma_{ee}(\psi(2S)) = 2.54 \pm 0.03 \pm 0.11$  keV from ADAM 06.16 Using  $B(\psi(3770) \rightarrow J/\psi\pi^+\pi^-) = (1.89 \pm 0.20 \pm 0.20) \times 10^{-3}$  from ADAM 06.

17 Not independent of other results in BRIERE 06.

18 Uses  $B(\psi(2S) \rightarrow \gamma\chi_{c2}) = 9.22 \pm 0.11 \pm 0.46$  % from ATHAR 04,  $\psi(2S)$  mass and width from PDG 04, and  $\Gamma_{ee}(\psi(2S)) = 2.54 \pm 0.03 \pm 0.11$  keV from ADAM 06.19 Using  $\sigma(e^+e^- \rightarrow \psi(3770) \rightarrow \text{hadrons}) = (6.38 \pm 0.08)^{+0.41}_{-0.30}$  nb from BESSON 06 and  $B(K_S^0 \rightarrow \pi^+\pi^-) = 0.6895 \pm 0.0014$ .

- 20 Using  $B(K_S^0 \rightarrow \pi^+ \pi^-) = 0.6860 \pm 0.0027$ .
- 21 Using  $\sigma_{tot}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.
- 22 Assuming that interference effects between resonance and continuum can be neglected.
- 23 Using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.
- 24 Using  $\sigma^{obs} = 7.15 \pm 0.27 \pm 0.27$  nb and neglecting interference.
- 25 Comparing  $\sigma(e^+ e^- \rightarrow \phi\eta)$  at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

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