

$\psi(3770)$ 

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

### $\psi(3770)$ MASS (MeV)

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
<b>3773.7±0.4 OUR FIT</b> Error includes scale factor of 1.4.				
<b>3778.1±0.7 OUR AVERAGE</b>				
3778.1±0.7±0.6		<sup>1</sup> AAIJ	19M LHCb	$pp \rightarrow D\bar{D} + \text{anything}$
3779.2 <sup>+1.8+0.6</sup> <sub>-1.7-0.8</sub>		<sup>2</sup> ANASHIN	12A KEDR	$e^+e^- \rightarrow D\bar{D}$
3775.5±2.4±0.5	57	AUBERT	08B BABR	$B \rightarrow D\bar{D}K$
3776 ±5 ±4	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. • • •				
3779.8±0.6		<sup>3</sup> SHAMOV	17 RVUE	$e^+e^- \rightarrow D\bar{D}$ , hadrons
3772.0±1.9		<sup>4,5</sup> ABLIKIM	08D BES2	$e^+e^- \rightarrow \text{hadrons}$
3778.4±3.0±1.3	34	CHISTOV	04 BELL	Sup. by BRODZICKA 08

<sup>1</sup> Measured in prompt hadroproduction.

<sup>2</sup> Taking into account interference between the resonant and non-resonant  $D\bar{D}$  production.

<sup>3</sup> From the joint analysis of the data on the  $D\bar{D}$  and inclusive hadronic cross sections in the  $\psi(3770)$  region from BaBar, Belle, BES-II, CLEO and KEDR.

<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  $\delta = 0^\circ$ .

<sup>5</sup> Interference between the resonant and non-resonant  $D\bar{D}$  production not taken into account.

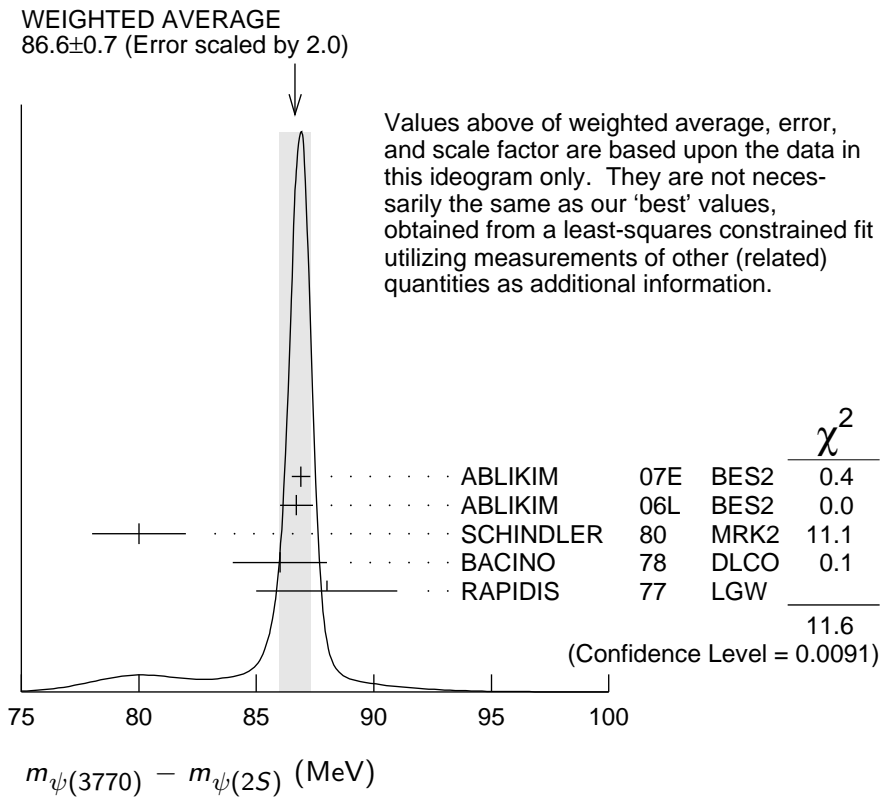
### $m_{\psi(3770)} - m_{\psi(2S)}$

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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>87.6±0.4 OUR FIT</b> Error includes scale factor of 1.4.			
<b>86.6±0.7 OUR AVERAGE</b> Error includes scale factor of 2.0. See the ideogram below.			
86.9±0.4	<sup>1</sup> ABLIKIM	07E BES2	$e^+e^- \rightarrow \text{hadrons}$
86.7±0.7	ABLIKIM	06L BES2	$e^+e^- \rightarrow \text{hadrons}$
80 ±2	SCHINDLER	80 MRK2	$e^+e^-$
86 ±2	<sup>2</sup> BACINO	78 DLCO	$e^+e^-$
88 ±3	RAPIDIS	77 LGW	$e^+e^-$

<sup>1</sup> BES-II  $\psi(2S)$  mass subtracted (see ABLIKIM 06L).

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



### $\psi(3770)$ WIDTH

VALUE (MeV)	EVTs	DOCUMENT ID	TECN	COMMENT
<b>27.2± 1.0 OUR FIT</b>				
<b>27.5± 0.9 OUR AVERAGE</b>				
24.9 <sup>+4.6+0.5</sup> <sub>-4.0-1.1</sub>		<sup>1</sup> ANASHIN	12A KEDR	$e^+e^- \rightarrow D\bar{D}$
30.4± 8.5		<sup>2,3</sup> 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		<sup>3</sup> 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± 2.4±0.3		<sup>3</sup> ABLIKIM	06L BES2	$e^+e^- \rightarrow$ hadrons
24 ± 5		<sup>3</sup> SCHINDLER	80 MRK2	$e^+e^-$
24 ± 5		<sup>3</sup> BACINO	78 DLCO	$e^+e^-$
28 ± 5		<sup>3</sup> RAPIDIS	77 LGW	$e^+e^-$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
25.8± 1.3		<sup>4</sup> SHAMOV	17 RVUE	$e^+e^- \rightarrow D\bar{D},$ hadrons
<sup>1</sup> Taking into account interference between the resonant and non-resonant $D\bar{D}$ production.				
<sup>2</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>3</sup> Interference between the resonant and non-resonant $D\bar{D}$ production not taken into account.				
<sup>4</sup> From the joint analysis of the data on the $D\bar{D}$ and inclusive hadronic cross sections in the $\psi(3770)$ region from BaBar, Belle, BES-II, CLEO and KEDR.				

**$\psi(3770)$  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
$\Gamma_1$ $D\bar{D}$	(93 $^{+8}_{-9}$ ) %	S=2.0
$\Gamma_2$ $D^0\bar{D}^0$	(52 $^{+4}_{-5}$ ) %	S=2.0
$\Gamma_3$ $D^+D^-$	(41 $\pm 4$ ) %	S=2.0
$\Gamma_4$ $J/\psi\pi^+\pi^-$	(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%
$\Gamma_8$ $e^+e^-$	(9.6 $\pm 0.7$ ) $\times 10^{-6}$	S=1.3

**Decays to light hadrons**

$\Gamma_9$ $b_1(1235)\pi$	< 1.4 $\times 10^{-5}$	CL=90%
$\Gamma_{10}$ $\phi\eta'$	< 7 $\times 10^{-4}$	CL=90%
$\Gamma_{11}$ $\omega\eta'$	< 4 $\times 10^{-4}$	CL=90%
$\Gamma_{12}$ $\rho^0\eta'$	< 6 $\times 10^{-4}$	CL=90%
$\Gamma_{13}$ $\phi\eta$	(3.1 $\pm 0.7$ ) $\times 10^{-4}$	
$\Gamma_{14}$ $\omega\eta$	< 1.4 $\times 10^{-5}$	CL=90%
$\Gamma_{15}$ $\rho^0\eta$	< 5 $\times 10^{-4}$	CL=90%
$\Gamma_{16}$ $\phi\pi^0$	< 3 $\times 10^{-5}$	CL=90%
$\Gamma_{17}$ $\omega\pi^0$	< 6 $\times 10^{-4}$	CL=90%
$\Gamma_{18}$ $\pi^+\pi^-\pi^0$	< 5 $\times 10^{-6}$	CL=90%
$\Gamma_{19}$ $\rho\pi$	< 5 $\times 10^{-6}$	CL=90%
$\Gamma_{20}$ $K^+K^-$		
$\Gamma_{21}$ $K^*(892)^+K^- + \text{c.c.}$	< 1.4 $\times 10^{-5}$	CL=90%
$\Gamma_{22}$ $K^*(892)^0\bar{K}^0 + \text{c.c.}$	< 1.2 $\times 10^{-3}$	CL=90%
$\Gamma_{23}$ $K_S^0K_L^0$	< 1.2 $\times 10^{-5}$	CL=90%
$\Gamma_{24}$ $2(\pi^+\pi^-)$	< 1.12 $\times 10^{-3}$	CL=90%
$\Gamma_{25}$ $2(\pi^+\pi^-)\pi^0$	< 1.06 $\times 10^{-3}$	CL=90%
$\Gamma_{26}$ $2(\pi^+\pi^-\pi^0)$	< 5.85 %	CL=90%
$\Gamma_{27}$ $\omega\pi^+\pi^-$	< 6.0 $\times 10^{-4}$	CL=90%
$\Gamma_{28}$ $3(\pi^+\pi^-)$	< 9.1 $\times 10^{-3}$	CL=90%
$\Gamma_{29}$ $3(\pi^+\pi^-)\pi^0$	< 1.37 %	CL=90%
$\Gamma_{30}$ $3(\pi^+\pi^-)2\pi^0$	< 11.74 %	CL=90%
$\Gamma_{31}$ $\eta\pi^+\pi^-$	< 1.24 $\times 10^{-3}$	CL=90%
$\Gamma_{32}$ $\pi^+\pi^-2\pi^0$	< 8.9 $\times 10^{-3}$	CL=90%
$\Gamma_{33}$ $\rho^0\pi^+\pi^-$	< 6.9 $\times 10^{-3}$	CL=90%

$\Gamma_{34}$	$\eta 3\pi$	$< 1.34$	$\times 10^{-3}$	CL=90%
$\Gamma_{35}$	$\eta 2(\pi^+ \pi^-)$	$< 2.43$	%	CL=90%
$\Gamma_{36}$	$\eta \rho^0 \pi^+ \pi^-$	$< 1.45$	%	CL=90%
$\Gamma_{37}$	$\eta' 3\pi$	$< 2.44$	$\times 10^{-3}$	CL=90%
$\Gamma_{38}$	$K^+ K^- \pi^+ \pi^-$	$< 9.0$	$\times 10^{-4}$	CL=90%
$\Gamma_{39}$	$\phi \pi^+ \pi^-$	$< 4.1$	$\times 10^{-4}$	CL=90%
$\Gamma_{40}$	$K^+ K^- 2\pi^0$	$< 4.2$	$\times 10^{-3}$	CL=90%
$\Gamma_{41}$	$4(\pi^+ \pi^-)$	$< 1.67$	%	CL=90%
$\Gamma_{42}$	$4(\pi^+ \pi^-) \pi^0$	$< 3.06$	%	CL=90%
$\Gamma_{43}$	$\phi f_0(980)$	$< 4.5$	$\times 10^{-4}$	CL=90%
$\Gamma_{44}$	$K^+ K^- \pi^+ \pi^- \pi^0$	$< 2.36$	$\times 10^{-3}$	CL=90%
$\Gamma_{45}$	$K^+ K^- \rho^0 \pi^0$	$< 8$	$\times 10^{-4}$	CL=90%
$\Gamma_{46}$	$K^+ K^- \rho^+ \pi^-$	$< 1.46$	%	CL=90%
$\Gamma_{47}$	$\omega K^+ K^-$	$< 3.4$	$\times 10^{-4}$	CL=90%
$\Gamma_{48}$	$\phi \pi^+ \pi^- \pi^0$	$< 3.8$	$\times 10^{-3}$	CL=90%
$\Gamma_{49}$	$K^{*0} K^- \pi^+ \pi^0 + \text{c.c.}$	$< 1.62$	%	CL=90%
$\Gamma_{50}$	$K^{*+} K^- \pi^+ \pi^- + \text{c.c.}$	$< 3.23$	%	CL=90%
$\Gamma_{51}$	$K^+ K^- \pi^+ \pi^- 2\pi^0$	$< 2.67$	%	CL=90%
$\Gamma_{52}$	$K^+ K^- 2(\pi^+ \pi^-)$	$< 1.03$	%	CL=90%
$\Gamma_{53}$	$K^+ K^- 2(\pi^+ \pi^-) \pi^0$	$< 3.60$	%	CL=90%
$\Gamma_{54}$	$\eta K^+ K^-$	$< 4.1$	$\times 10^{-4}$	CL=90%
$\Gamma_{55}$	$\eta K^+ K^- \pi^+ \pi^-$	$< 1.24$	%	CL=90%
$\Gamma_{56}$	$\rho^0 K^+ K^-$	$< 5.0$	$\times 10^{-3}$	CL=90%
$\Gamma_{57}$	$2(K^+ K^-)$	$< 6.0$	$\times 10^{-4}$	CL=90%
$\Gamma_{58}$	$\phi K^+ K^-$	$< 7.5$	$\times 10^{-4}$	CL=90%
$\Gamma_{59}$	$2(K^+ K^-) \pi^0$	$< 2.9$	$\times 10^{-4}$	CL=90%
$\Gamma_{60}$	$2(K^+ K^-) \pi^+ \pi^-$	$< 3.2$	$\times 10^{-3}$	CL=90%
$\Gamma_{61}$	$K_S^0 K^- \pi^+$	$< 3.2$	$\times 10^{-3}$	CL=90%
$\Gamma_{62}$	$K_S^0 K^- \pi^+ \pi^0$	$< 1.33$	%	CL=90%
$\Gamma_{63}$	$K_S^0 K^- \rho^+$	$< 6.6$	$\times 10^{-3}$	CL=90%
$\Gamma_{64}$	$K_S^0 K^- 2\pi^+ \pi^-$	$< 8.7$	$\times 10^{-3}$	CL=90%
$\Gamma_{65}$	$K_S^0 K^- \pi^+ \rho^0$	$< 1.6$	%	CL=90%
$\Gamma_{66}$	$K_S^0 K^- \pi^+ \eta$	$< 1.3$	%	CL=90%
$\Gamma_{67}$	$K_S^0 K^- 2\pi^+ \pi^- \pi^0$	$< 4.18$	%	CL=90%
$\Gamma_{68}$	$K_S^0 K^- 2\pi^+ \pi^- \eta$	$< 4.8$	%	CL=90%
$\Gamma_{69}$	$K_S^0 K^- \pi^+ 2(\pi^+ \pi^-)$	$< 1.22$	%	CL=90%
$\Gamma_{70}$	$K_S^0 K^- \pi^+ 2\pi^0$	$< 2.65$	%	CL=90%
$\Gamma_{71}$	$K_S^0 K^- K^+ K^- \pi^+$	$< 4.9$	$\times 10^{-3}$	CL=90%
$\Gamma_{72}$	$K_S^0 K^- K^+ K^- \pi^+ \pi^0$	$< 3.0$	%	CL=90%
$\Gamma_{73}$	$K_S^0 K^- K^+ K^- \pi^+ \eta$	$< 2.2$	%	CL=90%
$\Gamma_{74}$	$K^{*0} K^- \pi^+ + \text{c.c.}$	$< 9.7$	$\times 10^{-3}$	CL=90%
$\Gamma_{75}$	$\rho \bar{p}$			
$\Gamma_{76}$	$\rho \bar{p} \pi^0$	$< 4$	$\times 10^{-5}$	CL=90%

$\Gamma_{77}$	$\rho\bar{p}\pi^+\pi^-$	< 5.8	$\times 10^{-4}$	CL=90%
$\Gamma_{78}$	$\Lambda\bar{\Lambda}$	< 1.2	$\times 10^{-4}$	CL=90%
$\Gamma_{79}$	$\rho\bar{p}\pi^+\pi^-\pi^0$	< 1.85	$\times 10^{-3}$	CL=90%
$\Gamma_{80}$	$\omega\rho\bar{p}$	< 2.9	$\times 10^{-4}$	CL=90%
$\Gamma_{81}$	$\Lambda\bar{\Lambda}\pi^0$	< 7	$\times 10^{-5}$	CL=90%
$\Gamma_{82}$	$\rho\bar{p}2(\pi^+\pi^-)$	< 2.6	$\times 10^{-3}$	CL=90%
$\Gamma_{83}$	$\eta\rho\bar{p}$	< 5.4	$\times 10^{-4}$	CL=90%
$\Gamma_{84}$	$\eta\rho\bar{p}\pi^+\pi^-$	< 3.3	$\times 10^{-3}$	CL=90%
$\Gamma_{85}$	$\rho^0\rho\bar{p}$	< 1.7	$\times 10^{-3}$	CL=90%
$\Gamma_{86}$	$\rho\bar{p}K^+K^-$	< 3.2	$\times 10^{-4}$	CL=90%
$\Gamma_{87}$	$\eta\rho\bar{p}K^+K^-$	< 6.9	$\times 10^{-3}$	CL=90%
$\Gamma_{88}$	$\pi^0\rho\bar{p}K^+K^-$	< 1.2	$\times 10^{-3}$	CL=90%
$\Gamma_{89}$	$\phi\rho\bar{p}$	< 1.3	$\times 10^{-4}$	CL=90%
$\Gamma_{90}$	$\Lambda\bar{\Lambda}\pi^+\pi^-$	< 2.5	$\times 10^{-4}$	CL=90%
$\Gamma_{91}$	$\Lambda\bar{p}K^+$	< 2.8	$\times 10^{-4}$	CL=90%
$\Gamma_{92}$	$\Lambda\bar{p}K^+\pi^+\pi^-$	< 6.3	$\times 10^{-4}$	CL=90%
$\Gamma_{93}$	$\Lambda\bar{\Lambda}\eta$	< 1.9	$\times 10^{-4}$	CL=90%
$\Gamma_{94}$	$\Sigma^+\bar{\Sigma}^-$	< 1.0	$\times 10^{-4}$	CL=90%
$\Gamma_{95}$	$\Sigma^0\bar{\Sigma}^0$	< 4	$\times 10^{-5}$	CL=90%
$\Gamma_{96}$	$\Xi^+\bar{\Xi}^-$	< 1.5	$\times 10^{-4}$	CL=90%
$\Gamma_{97}$	$\Xi^0\bar{\Xi}^0$	< 1.4	$\times 10^{-4}$	CL=90%

#### Radiative decays

$\Gamma_{98}$	$\gamma\chi_{c2}$	< 6.4	$\times 10^{-4}$	CL=90%
$\Gamma_{99}$	$\gamma\chi_{c1}$	$(2.49 \pm 0.23)$	$\times 10^{-3}$	
$\Gamma_{100}$	$\gamma\chi_{c0}$	$(6.9 \pm 0.6)$	$\times 10^{-3}$	
$\Gamma_{101}$	$\gamma\eta_c$	< 7	$\times 10^{-4}$	CL=90%
$\Gamma_{102}$	$\gamma\eta_c(2S)$	< 9	$\times 10^{-4}$	CL=90%
$\Gamma_{103}$	$\gamma\eta'$	< 1.8	$\times 10^{-4}$	CL=90%
$\Gamma_{104}$	$\gamma\eta$	< 1.5	$\times 10^{-4}$	CL=90%
$\Gamma_{105}$	$\gamma\pi^0$	< 2	$\times 10^{-4}$	CL=90%

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## CONSTRAINED FIT INFORMATION

An overall fit to the total width, a partial width, and 3 branching ratios uses 23 measurements and one constraint to determine 5 parameters. The overall fit has a  $\chi^2 = 20.1$  for 19 degrees of freedom.

The following *off-diagonal* array elements are the correlation coefficients  $\langle \delta p_i \delta p_j \rangle / (\delta p_i \cdot \delta p_j)$ , in percent, from the fit to parameters  $p_i$ , including the branching fractions,  $x_i \equiv \Gamma_i / \Gamma_{\text{total}}$ . The fit constrains the  $x_i$  whose labels appear in this array to sum to one.

$x_3$	99		
$x_8$	0	0	
$\Gamma$	0	0	-44
	$x_2$	$x_3$	$x_8$

	Mode	Rate (MeV)	Scale factor
$\Gamma_2$	$D^0 \bar{D}^0$	$14.0 \pm 1.4$	1.8
$\Gamma_3$	$D^+ D^-$	$11.2 \pm 1.1$	1.7
$\Gamma_8$	$e^+ e^-$	$(2.62 \pm 0.18) \times 10^{-4}$	1.4

## $\psi(3770)$ PARTIAL WIDTHS

$\Gamma(e^+ e^-)$						$\Gamma_8$
VALUE (keV)	EVTS	DOCUMENT ID	TECN	COMMENT		
<b><math>0.262 \pm 0.018</math></b>		<b>OUR FIT</b>		Error includes scale factor of 1.4.		
<b><math>0.256 \pm 0.016</math></b>		<b>OUR AVERAGE</b>		Error includes scale factor of 1.2.		
$0.154^{+0.079+0.021}_{-0.058-0.027}$		1,2 ANASHIN	12A KEDR	$e^+ e^- \rightarrow D \bar{D}$		
$0.22 \pm 0.05$		3,4 ABLIKIM	08D BES2	$e^+ e^- \rightarrow$ hadrons		
$0.277 \pm 0.011 \pm 0.013$		4 ABLIKIM	07E BES2	$e^+ e^- \rightarrow$ hadrons		
$0.203 \pm 0.003^{+0.041}_{-0.027}$	1.4M	4,5 BESSON	06 CLEO	$e^+ e^- \rightarrow$ hadrons		
$0.276 \pm 0.050$		4 SCHINDLER	80 MRK2	$e^+ e^-$		
$0.18 \pm 0.06$		4 BACINO	78 DLCO	$e^+ e^-$		
• • •		We do not use the following data for averages, fits, limits, etc. • • •				
$0.196 \pm 0.018$		6 SHAMOV	17 RVUE	$e^+ e^- \rightarrow D \bar{D}$ , hadrons		
$0.414^{+0.072+0.093}_{-0.080-0.028}$		2,7 ANASHIN	12A KEDR	$e^+ e^- \rightarrow D \bar{D}$		
$0.37 \pm 0.09$		8 RAPIDIS	77 LGW	$e^+ e^-$		

<sup>1</sup> Solution I of the two solutions.

<sup>2</sup> Taking into account interference between the resonant and non-resonant  $D \bar{D}$  production.

<sup>3</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>4</sup> Interference between the resonant and non-resonant  $D \bar{D}$  production not taken into account.

- <sup>5</sup> BESSON 06 (as corrected in BESSON 10) measure  $\sigma(e^+e^- \rightarrow \psi(3770) \rightarrow \text{hadrons}) = 6.36 \pm 0.08^{+0.41}_{-0.30}$  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, PDG 04.
- <sup>6</sup> From the joint analysis of the data on the  $D\bar{D}$  and inclusive hadronic cross sections in the  $\psi(3770)$  region from BaBar, Belle, BES-II, CLEO and KEDR.
- <sup>7</sup> Solution II of the two solutions.
- <sup>8</sup> See also  $\Gamma(e^+e^-)/\Gamma_{\text{total}}$  below.

## $\psi(3770)$ BRANCHING RATIOS

$\Gamma(D\bar{D})/\Gamma_{\text{total}}$   $\Gamma_1/\Gamma = (\Gamma_2+\Gamma_3)/\Gamma$   
 VALUE EVTS DOCUMENT ID TECN COMMENT

**0.93  $^{+0.08}_{-0.09}$  OUR FIT** Error includes scale factor of 2.0.

**0.93  $^{+0.08}_{-0.09}$  OUR AVERAGE** Error includes scale factor of 2.1.

0.849  $\pm 0.056 \pm 0.018$  <sup>1</sup> ABLIKIM 08B BES2  $e^+e^- \rightarrow \text{non-}D\bar{D}$

1.033  $\pm 0.014^{+0.048}_{-0.066}$  1.427M <sup>2</sup> BESSON 06 CLEO  $e^+e^- \rightarrow \text{hadrons}$

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

0.836  $\pm 0.049$  <sup>3</sup> SHAMOV 17 RVUE  $e^+e^- \rightarrow D\bar{D}$ , hadrons

0.866  $\pm 0.050 \pm 0.036$  <sup>4,5</sup> ABLIKIM 07K BES2  $e^+e^- \rightarrow \text{non-}D\bar{D}$

0.836  $\pm 0.073 \pm 0.042$  <sup>5</sup> ABLIKIM 06L BES2  $e^+e^- \rightarrow D\bar{D}$

0.855  $\pm 0.017 \pm 0.058$  <sup>5,6</sup> ABLIKIM 06N BES2  $e^+e^- \rightarrow D\bar{D}$

<sup>1</sup> Neglecting interference.

<sup>2</sup> Obtained by comparing a measurement of the total cross section (corrected in BESSON 10) with that of  $D\bar{D}$  reported by CLEO in DOBBS 07.

<sup>3</sup> From the joint analysis of the data on the  $D\bar{D}$  and inclusive hadronic cross sections in the  $\psi(3770)$  region from BaBar, Belle, BES-II, CLEO and KEDR.

<sup>4</sup> Using  $\sigma^{obs} = 7.07 \pm 0.58$  nb and neglecting interference.

<sup>5</sup> Not independent of ABLIKIM 08B.

<sup>6</sup> 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.

$\Gamma(D^0\bar{D}^0)/\Gamma_{\text{total}}$   $\Gamma_2/\Gamma$   
 VALUE DOCUMENT ID TECN COMMENT

**0.52  $^{+0.04}_{-0.05}$  OUR FIT** Error includes scale factor of 2.0.

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

0.467  $\pm 0.047 \pm 0.023$  ABLIKIM 06L BES2  $e^+e^- \rightarrow D^0\bar{D}^0$

0.499  $\pm 0.013 \pm 0.038$  <sup>1</sup> ABLIKIM 06N BES2  $e^+e^- \rightarrow D^0\bar{D}^0$

<sup>1</sup> 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.

$\Gamma(D^+D^-)/\Gamma_{\text{total}}$   $\Gamma_3/\Gamma$   
 VALUE DOCUMENT ID TECN COMMENT

**0.41  $\pm 0.04$  OUR FIT** Error includes scale factor of 2.0.

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

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>1</sup> ABLIKIM 06N BES2  $e^+e^- \rightarrow D^+D^-$

<sup>1</sup> 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.

$\Gamma(D^0\bar{D}^0)/\Gamma(D^+D^-)$   $\Gamma_2/\Gamma_3$ 

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>1.253±0.016 OUR FIT</b>				
<b>1.253±0.016 OUR AVERAGE</b>				
1.252±0.009±0.013	5.3M	BONVICINI	14	CLEO $e^+e^- \rightarrow D\bar{D}$
1.39 ±0.31 ±0.12		PAKHLOVA	08	BELL 10.6 $e^+e^- \rightarrow D\bar{D}\gamma$
1.78 ±0.33 ±0.24		AUBERT	07BE	BABR $e^+e^- \rightarrow D\bar{D}\gamma$
1.27 ±0.12 ±0.08		ABLIKIM	06L	BES2 $e^+e^- \rightarrow D\bar{D}$
2.43 ±1.50 ±0.43	34	<sup>1</sup> CHISTOV	04	BELL $B^+ \rightarrow \psi(3770)K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1.258±0.016±0.014		<sup>2</sup> DOBBS	07	CLEO $e^+e^- \rightarrow D\bar{D}$

<sup>1</sup> See ADLER 88C for older measurements of this quantity.<sup>2</sup> Superseded by BONVICINI 14. $\Gamma(J/\psi\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_4/\Gamma$ 

<u>VALUE (units 10<sup>-3</sup>)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>1.93±0.28 OUR AVERAGE</b>				
1.89±0.20±0.20	231 ± 33	ADAM	06	CLEO $e^+e^- \rightarrow \psi(3770)$
3.4 ±1.4 ±0.9	17.8 ± 4.8	BAI	05	BES2 $e^+e^- \rightarrow \psi(3770)$

 $\Gamma(J/\psi\pi^0\pi^0)/\Gamma_{\text{total}}$   $\Gamma_5/\Gamma$ 

<u>VALUE (units 10<sup>-2</sup>)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.080±0.025±0.016</b>	39 ± 14	ADAM	06	CLEO $e^+e^- \rightarrow \psi(3770)$

 $\Gamma(J/\psi\eta)/\Gamma_{\text{total}}$   $\Gamma_6/\Gamma$ 

<u>VALUE (units 10<sup>-5</sup>)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>87±33±22</b>	22 ± 10	ADAM	06	CLEO $e^+e^- \rightarrow \psi(3770)$

 $\Gamma(J/\psi\pi^0)/\Gamma_{\text{total}}$   $\Gamma_7/\Gamma$ 

<u>VALUE (units 10<sup>-5</sup>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;28</b>	90	<10	ADAM	06	CLEO $e^+e^- \rightarrow \psi(3770)$

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

<u>VALUE (units 10<sup>-5</sup>)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.96±0.07 OUR FIT</b> Error includes scale factor of 1.3.			
<b>1.3 ±0.2</b>	RAPIDIS	77	LGW $e^+e^-$

## ————— DECAYS TO LIGHT HADRONS —————

 $\Gamma(b_1(1235)\pi)/\Gamma_{\text{total}}$   $\Gamma_9/\Gamma$ 

<u>VALUE (units 10<sup>-5</sup>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>&lt;1.4</b>	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.



$\Gamma(\phi\eta')/\Gamma_{\text{total}}$   $\Gamma_{10}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;7</b>	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

 $\Gamma(\omega\eta')/\Gamma_{\text{total}}$   $\Gamma_{11}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;4</b>	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

 $\Gamma(\rho^0\eta')/\Gamma_{\text{total}}$   $\Gamma_{12}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;6</b>	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

 $\Gamma(\phi\eta)/\Gamma_{\text{total}}$   $\Gamma_{13}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b><math>3.1 \pm 0.6 \pm 0.3</math></b>		<sup>1</sup> ADAMS	06	CLEO $3.773 e^+e^- \rightarrow \phi\eta$

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

<19	90	<sup>2</sup> ABLIKIM	07B	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\omega\eta)/\Gamma_{\text{total}}$   $\Gamma_{14}/\Gamma$ 

VALUE (units $10^{-5}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.4</b>	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

 $\Gamma(\rho^0\eta)/\Gamma_{\text{total}}$   $\Gamma_{15}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;5</b>	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

 $\Gamma(\phi\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{16}/\Gamma$ 

VALUE (units $10^{-5}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 3</b>	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

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

<50	90	<sup>2</sup> ABLIKIM	07B	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

$\Gamma(\omega\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{17}/\Gamma$

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<6	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

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

VALUE (units $10^{-6}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<5	90	<sup>1,2</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Data suggest possible destructive interference with continuum.

<sup>2</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

$\Gamma(\rho\pi)/\Gamma_{\text{total}}$   $\Gamma_{19}/\Gamma$

VALUE (units $10^{-6}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<5	90	<sup>1,2</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

<sup>2</sup> Data suggest possible destructive interference with continuum.

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

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
• • •				We do not use the following data for averages, fits, limits, etc. • • •

$\sim 10^{-5}$		<sup>1</sup> DRUZHININ	15	RVUE $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> DRUZHININ 15 uses BABAR and CLEO data taking into account interference of the processes  $e^+e^- \rightarrow K^+K^-$  and  $e^+e^- \rightarrow K_S^0 K_L^0$ .

$\Gamma(K^*(892)^+K^- + \text{c.c.})/\Gamma_{\text{total}}$   $\Gamma_{21}/\Gamma$

VALUE (units $10^{-5}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<1.4	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

$\Gamma(K^*(892)^0\bar{K}^0 + \text{c.c.})/\Gamma_{\text{total}}$   $\Gamma_{22}/\Gamma$

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<1.2	90	<sup>1</sup> ADAMS	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Comparing cross sections at  $\sqrt{s} = 3.773$  GeV and  $\sqrt{s} = 3.671$  GeV, neglecting interference, and using  $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$  nb.

$\Gamma(K_S^0 K_L^0)/\Gamma_{\text{total}}$   $\Gamma_{23}/\Gamma$

VALUE (units $10^{-5}$ )	CL%	DOCUMENT ID	TECN	COMMENT
< 1.2	90	<sup>1</sup> CRONIN-HEN..06	06	CLEO $e^+e^- \rightarrow \psi(3770)$

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

<21	90	<sup>2</sup> ABLIKIM	04F	BES $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma(e^+e^- \rightarrow \psi(3770) \rightarrow \text{hadrons}) = (6.38 \pm 0.08^{+0.41}_{-0.30})$  nb from BESSON 06 and  $B(K_S^0 \rightarrow \pi^+\pi^-) = 0.6895 \pm 0.0014$ .

<sup>2</sup> Using  $B(K_S^0 \rightarrow \pi^+\pi^-) = 0.6860 \pm 0.0027$ .

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

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;11.2</b>	90	<sup>1</sup> HUANG 06A	CLEO	$e^+e^- \rightarrow \psi(3770)$

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

<48	90	<sup>2</sup> ABLIKIM 07B	BES2	$e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(2(\pi^+\pi^-\pi^0))/\Gamma_{\text{total}}$   $\Gamma_{25}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;10.6</b>	90	<sup>1</sup> HUANG 06A	CLEO	$e^+e^- \rightarrow \psi(3770)$

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

<62	90	<sup>2</sup> ABLIKIM 07B	BES2	$e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(2(\pi^+\pi^-\pi^0))/\Gamma_{\text{total}}$   $\Gamma_{26}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<b>&lt;58.5</b>	90	305	ABLIKIM 08N	BES2	$e^+e^- \rightarrow \psi(3770)$

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

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 6.0</b>	90	<sup>1</sup> HUANG 06A	CLEO	$e^+e^- \rightarrow \psi(3770)$

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

<55	90	<sup>2</sup> ABLIKIM 07I	BES2	$3.77 e^+e^-$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(3(\pi^+\pi^-))/\Gamma_{\text{total}}$   $\Gamma_{28}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;91</b>	90	<sup>1</sup> ABLIKIM 07B	BES2	$e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(3(\pi^+\pi^-\pi^0))/\Gamma_{\text{total}}$   $\Gamma_{29}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;137</b>	90	<sup>1</sup> ABLIKIM 07B	BES2	$e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(3(\pi^+\pi^-)2\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{30}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<b>&lt;117.4</b>	90	59	ABLIKIM 08N	BES2	$e^+e^- \rightarrow \psi(3770)$

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

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
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<b>&lt;1.24</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<2.3	90	<sup>2</sup> ABLIKIM	10D	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\pi^+\pi^-2\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{32}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
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<b>&lt;8.9</b>	90	218	ABLIKIM	08N	BES2 $e^+e^- \rightarrow \psi(3770)$
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 $\Gamma(\rho^0\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{33}/\Gamma$ 

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
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<b>&lt;6.9</b>	90	<sup>1</sup> ABLIKIM	07F	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\eta3\pi)/\Gamma_{\text{total}}$   $\Gamma_{34}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
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<b>&lt;13.4</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

 $\Gamma(\eta2(\pi^+\pi^-))/\Gamma_{\text{total}}$   $\Gamma_{35}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
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<b>&lt;243</b>	90	<sup>1</sup> ABLIKIM	07B	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\eta\rho^0\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{36}/\Gamma$ 

<u>VALUE (units <math>10^{-2}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
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<b>&lt;1.45</b>	90	<sup>1</sup> ABLIKIM	10D	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\eta'3\pi)/\Gamma_{\text{total}}$   $\Gamma_{37}/\Gamma$ 

<u>VALUE (units <math>10^{-4}</math>)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
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<b>&lt;24.4</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

$\Gamma(K^+ K^- \pi^+ \pi^-)/\Gamma_{\text{total}}$   $\Gamma_{38}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 9.0</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<48	90	<sup>2</sup> ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\phi \pi^+ \pi^-)/\Gamma_{\text{total}}$   $\Gamma_{39}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 4.1</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<16	90	<sup>2</sup> ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(K^+ K^- 2\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{40}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
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<b>&lt;4.2</b>	90	14	ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(4(\pi^+ \pi^-))/\Gamma_{\text{total}}$   $\Gamma_{41}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;16.7</b>	90	<sup>1</sup> ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(4(\pi^+ \pi^- \pi^0))/\Gamma_{\text{total}}$   $\Gamma_{42}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;30.6</b>	90	<sup>1</sup> ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\phi f_0(980))/\Gamma_{\text{total}}$   $\Gamma_{43}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;4.5</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

 $\Gamma(K^+ K^- \pi^+ \pi^- \pi^0)/\Gamma_{\text{total}}$   $\Gamma_{44}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 23.6</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<111	90	<sup>2</sup> ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

$\Gamma(K^+ K^- \rho^0 \pi^0)/\Gamma_{\text{total}}$   $\Gamma_{45}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<8	90	<sup>1</sup> ABLIKIM 07i	BES2	$3.77 e^+ e^-$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

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

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<146	90	<sup>1</sup> ABLIKIM 07i	BES2	$3.77 e^+ e^-$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

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

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
< 3.4	90	<sup>1</sup> HUANG 06A	CLEO	$e^+ e^- \rightarrow \psi(3770)$

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

<66	90	<sup>2</sup> ABLIKIM 07i	BES2	$3.77 e^+ e^-$
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<sup>1</sup> Using  $\sigma_{tot}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

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

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<38	90	<sup>1</sup> ABLIKIM 07i	BES2	$3.77 e^+ e^-$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(K^{*0} K^- \pi^+ \pi^0 + \text{c.c.})/\Gamma_{\text{total}}$   $\Gamma_{49}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<162	90	<sup>1</sup> ABLIKIM 07i	BES2	$3.77 e^+ e^-$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(K^{*+} K^- \pi^+ \pi^- + \text{c.c.})/\Gamma_{\text{total}}$   $\Gamma_{50}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<323	90	<sup>1</sup> ABLIKIM 07i	BES2	$3.77 e^+ e^-$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(K^+ K^- \pi^+ \pi^- 2\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{51}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<26.7	90	24	ABLIKIM 08N	BES2	$e^+ e^- \rightarrow \psi(3770)$

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

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;10.3</b>	90	<sup>1</sup> ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

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

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;36.0</b>	90	<sup>1</sup> ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\eta K^+ K^-)/\Gamma_{\text{total}}$   $\Gamma_{54}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 4.1</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

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

<31	90	<sup>2</sup> ABLIKIM	10D BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{tot}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

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

VALUE (units $10^{-2}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.24</b>	90	<sup>1</sup> ABLIKIM	10D BES2	$e^+ e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\rho^0 K^+ K^-)/\Gamma_{\text{total}}$   $\Gamma_{56}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;5.0</b>	90	<sup>1</sup> ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(2(K^+ K^-))/\Gamma_{\text{total}}$   $\Gamma_{57}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 6.0</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

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

<17	90	<sup>2</sup> ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{tot}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

$\Gamma(\phi K^+ K^-)/\Gamma_{\text{total}}$   $\Gamma_{58}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 7.5</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<24	90	<sup>2</sup> ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(2(K^+ K^-)\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{59}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 2.9</b>	90	<sup>1</sup> HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<46	90	<sup>2</sup> ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{\text{tot}}(e^+ e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(2(K^+ K^-)\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{60}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;3.2</b>	90	<sup>1</sup> ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{\text{obs}}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(K_S^0 K^- \pi^+)/\Gamma_{\text{total}}$   $\Gamma_{61}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
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<b>&lt;3.2</b>	90	18	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(K_S^0 K^- \pi^+\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{62}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
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<b>&lt;13.3</b>	90	40	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(K_S^0 K^- \rho^+)/\Gamma_{\text{total}}$   $\Gamma_{63}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;6.6</b>	90	ABLIKIM	09C BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(K_S^0 K^- 2\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{64}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
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<b>&lt;8.7</b>	90	39	ABLIKIM	08M BES2	$e^+ e^- \rightarrow \psi(3770)$
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 $\Gamma(K_S^0 K^- \pi^+\rho^0)/\Gamma_{\text{total}}$   $\Gamma_{65}/\Gamma$ 

VALUE (units $10^{-2}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;1.6</b>	90	ABLIKIM	09C BES2	$e^+ e^- \rightarrow \psi(3770)$
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$\Gamma(K_S^0 K^- \pi^+ \eta)/\Gamma_{\text{total}}$   $\Gamma_{66}/\Gamma$

VALUE (units $10^{-2}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<1.3	90	ABLIKIM	09C	BES2 $e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K_S^0 K^- 2\pi^+ \pi^- \pi^0)/\Gamma_{\text{total}}$   $\Gamma_{67}/\Gamma$

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

$\Gamma(K_S^0 K^- 2\pi^+ \pi^- \eta)/\Gamma_{\text{total}}$   $\Gamma_{68}/\Gamma$

VALUE (units $10^{-2}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<4.8	90	ABLIKIM	09C	BES2 $e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K_S^0 K^- \pi^+ 2(\pi^+ \pi^-))/\Gamma_{\text{total}}$   $\Gamma_{69}/\Gamma$

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

$\Gamma(K_S^0 K^- \pi^+ 2\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{70}/\Gamma$

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

$\Gamma(K_S^0 K^- K^+ K^- \pi^+)/\Gamma_{\text{total}}$   $\Gamma_{71}/\Gamma$

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<4.9	90	ABLIKIM	09C	BES2 $e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K_S^0 K^- K^+ K^- \pi^+ \pi^0)/\Gamma_{\text{total}}$   $\Gamma_{72}/\Gamma$

VALUE (units $10^{-2}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<3.0	90	ABLIKIM	09C	BES2 $e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K_S^0 K^- K^+ K^- \pi^+ \eta)/\Gamma_{\text{total}}$   $\Gamma_{73}/\Gamma$

VALUE (units $10^{-2}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<2.2	90	ABLIKIM	09C	BES2 $e^+ e^- \rightarrow \psi(3770)$

$\Gamma(K^{*0} K^- \pi^+ + \text{c.c.})/\Gamma_{\text{total}}$   $\Gamma_{74}/\Gamma$

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<9.7	90	<sup>1</sup> ABLIKIM	07F	BES2 $e^+ e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+ e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

$\Gamma(p\bar{p})/\Gamma_{\text{total}}$   $\Gamma_{75}/\Gamma$

VALUE (units $10^{-6}$ )	EVTS	DOCUMENT ID	TECN	COMMENT
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• • • We do not use the following data for averages, fits, limits, etc. • • •

not seen		<sup>1</sup> AAIJ	17AD	LHCB	$pp \rightarrow B^+ X \rightarrow p\bar{p}K^+ X$
$7.1^+_{-2.9}$	684	<sup>2</sup> ABLIKIM	14L	BES3	$e^+ e^- \rightarrow \psi(3770)$
$310 \pm 30$	684	<sup>3</sup> ABLIKIM	14L	BES3	$e^+ e^- \rightarrow \psi(3770)$

<sup>1</sup> AAIJ 17AD reports  $B(B^+ \rightarrow \psi(3770)K^+ \rightarrow p\bar{p}K^+)/B(B^+ \rightarrow J/\psi K^+ \rightarrow p\bar{p}K^+) < 0.09$  (0.10) at 90% (95%) CL.

<sup>2</sup> Solution I of two equivalent solutions in a fit with a resonance interfering with continuum.

<sup>3</sup> Solution II of two equivalent solutions in a fit with a resonance interfering with continuum.

$\Gamma(\rho\bar{\rho}\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{76}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 0.4</b>	90	1,2 ABLIKIM 140	BES3	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
59 $^{+3}_{-2} \pm 5$		1,3 ABLIKIM 140	BES3	$e^+e^- \rightarrow \psi(3770)$
<12	90	4 ABLIKIM 07B	BES2	$e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Calculated by the authors using  $\sigma(e^+e^- \rightarrow \psi(3770) \rightarrow \text{hadrons}) = 6.36 \pm 0.08^{+0.41}_{-0.30}$  nb from BESSON 10.

<sup>2</sup> Solution I of two equivalent solutions in a fit with a resonance interfering with continuum.

<sup>3</sup> Solution II of two equivalent solutions in a fit with a resonance interfering with continuum.

<sup>4</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\rho\bar{\rho}\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{77}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 5.8</b>	90	1 HUANG 06A	CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<16	90	2 ABLIKIM 07B	BES2	$e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\Lambda\bar{\Lambda})/\Gamma_{\text{total}}$   $\Gamma_{78}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.2</b>	90	1 HUANG 06A	CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<4	90	2 ABLIKIM 07F	BES2	$e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\rho\bar{\rho}\pi^+\pi^-\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{79}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;18.5</b>	90	1 HUANG 06A	CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<73	90	2 ABLIKIM 07B	BES2	$e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\omega\rho\bar{\rho})/\Gamma_{\text{total}}$   $\Gamma_{80}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 2.9</b>	90	1 HUANG 06A	CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<30	90	2 ABLIKIM 07I	BES2	$3.77 e^+e^-$

<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Using  $\sigma^{obs} = 7.15 \pm 0.27 \pm 0.27$  nb and neglecting interference.

$\Gamma(\Lambda\bar{\Lambda}\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{81}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 0.7</b>	90	<sup>1</sup> ABLIKIM	13Q	BES3 $e^+e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<12	90	<sup>2</sup> ABLIKIM	07I	BES2 $3.77 e^+e^-$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\rho\bar{\rho}2(\pi^+\pi^-))/\Gamma_{\text{total}}$   $\Gamma_{82}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;2.6</b>	90	<sup>1</sup> ABLIKIM	07F	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\eta\rho\bar{\rho})/\Gamma_{\text{total}}$   $\Gamma_{83}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 5.4</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<11	90	<sup>2</sup> ABLIKIM	10D	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\eta\rho\bar{\rho}\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{84}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;3.3</b>	90	<sup>1</sup> ABLIKIM	10D	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\rho^0\rho\bar{\rho})/\Gamma_{\text{total}}$   $\Gamma_{85}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt;1.7</b>	90	<sup>1</sup> ABLIKIM	07F	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\rho\bar{\rho}K^+K^-)/\Gamma_{\text{total}}$   $\Gamma_{86}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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<b>&lt; 3.2</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<11	90	<sup>2</sup> ABLIKIM	07B	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

$\Gamma(\eta\rho\bar{p}K^+K^-)/\Gamma_{\text{total}}$   $\Gamma_{87}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;6.9</b>	90	<sup>1</sup> ABLIKIM	10D	BES2 $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\pi^0\rho\bar{p}K^+K^-)/\Gamma_{\text{total}}$   $\Gamma_{88}/\Gamma$ 

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.2</b>	90	<sup>1</sup> ABLIKIM	10D	BES2 $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\phi\rho\bar{p})/\Gamma_{\text{total}}$   $\Gamma_{89}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.3</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$

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

<9	90	<sup>2</sup> ABLIKIM	07B	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\Lambda\bar{\Lambda}\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{90}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt; 2.5</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$

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

< 4.7	90	<sup>2</sup> ABLIKIM	13Q	BES3 $e^+e^- \rightarrow \psi(3770)$
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<39	90	<sup>3</sup> ABLIKIM	07F	BES2 $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

<sup>2</sup> Assuming that interference effects between resonance and continuum can be neglected.

<sup>3</sup> Assuming that interference effects between resonance and continuum can be neglected and using  $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$  nb.

 $\Gamma(\Lambda\bar{p}K^+)/\Gamma_{\text{total}}$   $\Gamma_{91}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;2.8</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

 $\Gamma(\Lambda\bar{p}K^+\pi^+\pi^-)/\Gamma_{\text{total}}$   $\Gamma_{92}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;6.3</b>	90	<sup>1</sup> HUANG	06A	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Using  $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$  nb at the resonance.

 $\Gamma(\Lambda\bar{\Lambda}\eta)/\Gamma_{\text{total}}$   $\Gamma_{93}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.9</b>	90	<sup>1</sup> ABLIKIM	13Q	BES3 $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected.

$\Gamma(\Sigma^+\bar{\Sigma}^-)/\Gamma_{\text{total}}$   $\Gamma_{94}/\Gamma$

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.0</b>	90	<sup>1</sup> ABLIKIM	13Q	BES3 $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected.

$\Gamma(\Sigma^0\bar{\Sigma}^0)/\Gamma_{\text{total}}$   $\Gamma_{95}/\Gamma$

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;0.4</b>	90	<sup>1</sup> ABLIKIM	13Q	BES3 $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected.

$\Gamma(\Xi^+\bar{\Xi}^-)/\Gamma_{\text{total}}$   $\Gamma_{96}/\Gamma$

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.5</b>	90	<sup>1</sup> ABLIKIM	13Q	BES3 $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected.

$\Gamma(\Xi^0\bar{\Xi}^0)/\Gamma_{\text{total}}$   $\Gamma_{97}/\Gamma$

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;1.4</b>	90	<sup>1</sup> ABLIKIM	13Q	BES3 $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Assuming that interference effects between resonance and continuum can be neglected.

————— **RADIATIVE DECAYS** —————

$\Gamma(\gamma\chi_{c2})/\Gamma_{\text{total}}$   $\Gamma_{98}/\Gamma$

VALUE (units $10^{-3}$ )	CL%	DOCUMENT ID	TECN	COMMENT
<b>&lt;0.64</b>	90	<sup>1</sup> ABLIKIM	15J	BES3 $e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

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

<2.0	90	<sup>2</sup> BRIERE	06	CLEO $e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$
<0.9	90	<sup>3</sup> COAN	06A	CLEO $e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

<sup>1</sup> This limit is equivalent to  $(0.25 \pm 0.21 \pm 0.18) \times 10^{-3}$  branching fraction value.

<sup>2</sup> 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.

<sup>3</sup> 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  $\sigma(e^+e^- \rightarrow \psi(3770))$ .

$\Gamma(\gamma\chi_{c1})/\Gamma_{\text{total}}$   $\Gamma_{99}/\Gamma$

VALUE (units $10^{-3}$ )	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2.49 ± 0.23 OUR AVERAGE</b>				
1.98 ± 0.78 ± 0.05	202	<sup>1</sup> ABLIKIM	16B	BES3 $e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$
2.48 ± 0.15 ± 0.23	0.6k	ABLIKIM	15J	BES3 $e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$
2.4 ± 0.8 ± 0.2		<sup>2</sup> ABLIKIM	14H	BES3 $e^+e^- \rightarrow \psi(3770) \rightarrow K_S^0 K^\pm \pi^\mp$
2.9 ± 0.5 ± 0.4		<sup>3</sup> 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. • • •

$3.9 \pm 1.4 \pm 0.6$	54	<sup>4</sup> BRIERE	06	CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$
$2.8 \pm 0.5 \pm 0.4$	53	<sup>5</sup> COAN	06A	CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

<sup>1</sup> ABLIKIM 16B reports  $(1.94 \pm 0.42 \pm 0.64) \times 10^{-3}$  from a measurement of  $[\Gamma(\psi(3770) \rightarrow \gamma\chi_{c1})/\Gamma_{\text{total}}] / [B(\psi(2S) \rightarrow \gamma\chi_{c1}(1P))]$  assuming  $B(\psi(2S) \rightarrow \gamma\chi_{c1}(1P)) = (9.55 \pm 0.31) \times 10^{-2}$ , which we rescale to our best value  $B(\psi(2S) \rightarrow \gamma\chi_{c1}(1P)) = (9.75 \pm 0.24) \times 10^{-2}$ . Our first error is their experiment's error and our second error is the systematic error from using our best value.

<sup>2</sup> ABLIKIM 14H reports  $[\Gamma(\psi(3770) \rightarrow \gamma\chi_{c1})/\Gamma_{\text{total}}] \times [B(\chi_{c1}(1P) \rightarrow K_S^0 K^\pm \pi^\mp)] = (8.51 \pm 2.39 \pm 1.42) \times 10^{-6}$  which we divide by our best value  $B(\chi_{c1}(1P) \rightarrow K_S^0 K^\pm \pi^\mp) = 0.00349 \pm 0.00029$ . Our first error is their experiment's error and our second error is the systematic error from using our best value. We have calculated the best value of  $B(\chi_{c1}(1P) \rightarrow K_S^0 K^\pm \pi^\mp)$  as 1/2 of  $B(\chi_{c1}(1P) \rightarrow \bar{K}^0 K^+ \pi^- + \text{c.c.}) = (7.0 \pm 0.6) \times 10^{-3}$ .

<sup>3</sup> Averages the two measurements from COAN 06A and BRIERE 06.

<sup>4</sup> 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.

<sup>5</sup> 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  $\sigma(e^+e^- \rightarrow \psi(3770))$ .

**$\Gamma(\gamma\chi_{c1})/\Gamma(J/\psi\pi^+\pi^-)$   $\Gamma_{99}/\Gamma_4$**

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b><math>1.49 \pm 0.31 \pm 0.26</math></b>	$53 \pm 10$	<sup>1</sup> COAN	06A	CLEO $e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

<sup>1</sup> Using  $B(\psi(3770) \rightarrow J/\psi\pi^+\pi^-) = (1.89 \pm 0.20 \pm 0.20) \times 10^{-3}$  from ADAM 06.

**$\Gamma(\gamma\chi_{c0})/\Gamma_{\text{total}}$   $\Gamma_{100}/\Gamma$**

<u>VALUE (units <math>10^{-3}</math>)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b><math>6.9 \pm 0.6</math> OUR AVERAGE</b>					
$6.7 \pm 0.7 \pm 0.1$	2.2K	<sup>1</sup> ABLIKIM	16B	BES3	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$
$7.3 \pm 0.7 \pm 0.6$	274	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	<sup>2</sup> COAN	06A	CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$
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<sup>1</sup> ABLIKIM 16B reports  $(6.88 \pm 0.28 \pm 0.67) \times 10^{-3}$  from a measurement of  $[\Gamma(\psi(3770) \rightarrow \gamma\chi_{c0})/\Gamma_{\text{total}}] / [B(\psi(2S) \rightarrow \gamma\chi_{c0}(1P))]$  assuming  $B(\psi(2S) \rightarrow \gamma\chi_{c0}(1P)) = (9.99 \pm 0.27) \times 10^{-2}$ , which we rescale to our best value  $B(\psi(2S) \rightarrow \gamma\chi_{c0}(1P)) = (9.79 \pm 0.20) \times 10^{-2}$ . Our first error is their experiment's error and our second error is the systematic error from using our best value.

<sup>2</sup> 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  $\sigma(e^+e^- \rightarrow \psi(3770))$ .

**$\Gamma(\gamma\chi_{c0})/\Gamma(\gamma\chi_{c2})$   $\Gamma_{100}/\Gamma_{98}$**

<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$> 8$	90	<sup>1</sup> BRIERE	06	CLEO $e^+e^- \rightarrow \psi(3770)$

<sup>1</sup> Not independent of other results in BRIERE 06.

$\Gamma(\gamma\chi_{c0})/\Gamma(\gamma\chi_{c1})$   $\Gamma_{100}/\Gamma_{99}$ 

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
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• • • We do not use the following data for averages, fits, limits, etc. • • •

$2.5 \pm 0.6$		<sup>1</sup> BRIERE	06	CLEO $e^+e^- \rightarrow \psi(3770)$
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<sup>1</sup> Not independent of other results in BRIERE 06.

 $\Gamma(\gamma\eta_c)/\Gamma_{\text{total}}$   $\Gamma_{101}/\Gamma$ 

VALUE	CL%	DOCUMENT ID	TECN
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$< 7 \times 10^{-4}$	90	<sup>1</sup> ABLIKIM	14H BES3
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<sup>1</sup> ABLIKIM 14H reports  $[\Gamma(\psi(3770) \rightarrow \gamma\eta_c)/\Gamma_{\text{total}}] \times [B(\eta_c(1S) \rightarrow K_S^0 K^\pm \pi^\mp)] < 16 \times 10^{-6}$  which we divide by our best value  $B(\eta_c(1S) \rightarrow K_S^0 K^\pm \pi^\mp) = 2.43 \times 10^{-2}$ .

We have calculated the best value of  $B(\eta_c(1S) \rightarrow K_S^0 K^\pm \pi^\mp)$  as 1/3 of  $B(\eta_c(1S) \rightarrow K\bar{K}\pi) = 7.3 \times 10^{-2}$ .

 $\Gamma(\gamma\eta_c(2S))/\Gamma_{\text{total}}$   $\Gamma_{102}/\Gamma$ 

VALUE	CL%	DOCUMENT ID	TECN
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$< 9 \times 10^{-4}$	90	<sup>1</sup> ABLIKIM	14H BES3
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<sup>1</sup> ABLIKIM 14H reports  $[\Gamma(\psi(3770) \rightarrow \gamma\eta_c(2S))/\Gamma_{\text{total}}] \times [B(\eta_c(2S) \rightarrow K_S^0 K^\pm \pi^\mp)] < 5.6 \times 10^{-6}$  which we divide by our best value  $B(\eta_c(2S) \rightarrow K_S^0 K^\pm \pi^\mp) = 6 \times 10^{-3}$ .

We have calculated the best value of  $B(\eta_c(2S) \rightarrow K_S^0 K^\pm \pi^\mp)$  as 1/3 of  $B(\eta_c(2S) \rightarrow K\bar{K}\pi) = 1.9 \times 10^{-2}$ .

 $\Gamma(\gamma\eta')/\Gamma_{\text{total}}$   $\Gamma_{103}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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$< 1.8$	90	<sup>1</sup> PEDLAR	09	CLE3 $\psi(2S) \rightarrow \gamma X$
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<sup>1</sup> Assuming maximal destructive interference between  $\psi(3770)$  and continuum sources.

 $\Gamma(\gamma\eta)/\Gamma_{\text{total}}$   $\Gamma_{104}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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$< 1.5$	90	<sup>1</sup> PEDLAR	09	CLE3 $\psi(2S) \rightarrow \gamma X$
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<sup>1</sup> Assuming maximal destructive interference between  $\psi(3770)$  and continuum sources.

 $\Gamma(\gamma\pi^0)/\Gamma_{\text{total}}$   $\Gamma_{105}/\Gamma$ 

VALUE (units $10^{-4}$ )	CL%	DOCUMENT ID	TECN	COMMENT
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$< 2$	90	PEDLAR	09	CLE3 $\psi(2S) \rightarrow \gamma X$
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