Reference = MIZUK 16; PRL 117 142001
Verifier code = BELLE

Normally we send all verifications for one experiment to one person, usually the spokesperson or data-analysis co-ordinator, who then distributes them to the appropriate people. Please tell us if we should send the verifications for your experiment to someone else.

PLEASE READ NOW

PLEASE REPLY WITHIN ONE WEEK

Karim Trabelsi

EMAIL: karim.trabelsi@kek.jp

March 20, 2017

Dear Colleague,

(1) Please check the results of your experiment carefully. They are marked.

(2) Please reply within one week.

(3) Please reply even if everything is correct.

(4) IMPORTANT!! Please tell WHICH papers you are verifying. We have lots of requests out.

(5) Feel free to make comments on our treatment of any of the results (not just yours) you see.

Thank you for helping us make the Review accurate and useful.

Sincerely,

Simon Eidelman
BINP, Budker Inst. of Nuclear Physics
Prospekt Lavrent'eva 11
RU-630090 Novosibirsk
Russian Federation

EMAIL: simon.eidelman@cern.ch

$b\overline{b}$ MESONS

NODE=MXXX030

NODE=M207

$X(10610)^{\pm}$

$I^G(J^P) = 1^+(1^+)$

Observed by BONDAR 12 in $\Upsilon(5S)$ decays to $\Upsilon(\text{nS})\pi^+\pi^-$ (n = 1, 2, 3) and $h_b(\text{mP})\pi^+\pi^-$ (m = 1, 2). $J^P = 1^+$ is favored from angular analyses. Isospin = 1 is favored due to observation by KROKOVNY 13 of a corresponding neutral state produced in $\Upsilon(10860) \to \Upsilon(2S)/\Upsilon(3S)\pi^0\pi^0$ decays at a consistent mass.

NODE=M207

$X(10610)^{\pm}$ BRANCHING RATIOS

NODE=M207225

$\Gamma(h_b(1P)\pi^+)/\Gamma_{total}$ Γ_4/Γ

NODE=M207R04
NODE=M207R04

	VALUE (units 10^{-2})	DOCUMENT ID	TECN	COMMENT
	$3.45^{+0.87}_{-0.71}{}^{+0.86}_{-0.63}$	[10] GARMASH 16	BELL	$e^+e^- \to \pi^- B^+ \overline{B}^{*0}$, $\pi^- \overline{B}^0 B^{*+}$
	• • • We do not use the following data for averages, fits, limits, etc. • • •			
YOUR DATA	possibly seen	[11] MIZUK 16	BELL	$e^+e^- \to h_b(1P)\pi^+\pi^-$
	seen	[12] BONDAR 12	BELL	$e^+e^- \to h_b(1P)\pi^+\pi^-$

[10] Assuming the $X(10610)^{\pm}$ decay width is saturated by the channels $\pi^+\Upsilon(1S, 2S, 3S)$, $\pi^+ h_b(1P, 2P)$, and $B^+\overline{B}^{*0} + \overline{B}^0 B^{*+}$, and using the results from BONDAR 12 and MIZUK 16. NODE=M207R04;LINKAGE=C

YOUR NOTE [11] Using e^+e^- energies near the $\Upsilon(11020)$. NODE=M207R04;LINKAGE=A

[12] Using e^+e^- energies near the $\Upsilon(10860)$. NODE=M207R04;LINKAGE=B

$\Gamma(h_b(2P)\pi^+)/\Gamma_{total}$ Γ_5/Γ

NODE=M207R05
NODE=M207R05

	VALUE (units 10^{-2})	DOCUMENT ID	TECN	COMMENT
	$4.67^{+1.24}_{-1.00}{}^{+1.18}_{-0.89}$	[13] GARMASH 16	BELL	$e^+e^- \to \pi^- B^+ \overline{B}^{*0}$, $\pi^- \overline{B}^0 B^{*+}$
	• • • We do not use the following data for averages, fits, limits, etc. • • •			
YOUR DATA	possibly seen	[14] MIZUK 16	BELL	$e^+e^- \to h_b(2P)\pi^+\pi^-$
	seen	[15] BONDAR 12	BELL	$e^+e^- \to h_b(2P)\pi^+\pi^-$

[13] Assuming the $X(10610)^{\pm}$ decay width is saturated by the channels $\pi^+\Upsilon(1S, 2S, 3S)$, $\pi^+ h_b(1P, 2P)$, and $B^+\overline{B}^{*0} + \overline{B}^0 B^{*+}$, and using the results from BONDAR 12 and MIZUK 16. NODE=M207R05;LINKAGE=C

YOUR NOTE [14] Using e^+e^- energies near the $\Upsilon(11020)$. NODE=M207R05;LINKAGE=A

[15] Using e^+e^- energies near the $\Upsilon(10860)$. NODE=M207R05;LINKAGE=B

$X(10610)^{\pm}$ REFERENCES

NODE=M207

	GARMASH	16	PRL 116 212001	A. Garmash *et al.*	(BELLE Collab.)	REFID=57446
YOUR PAPER	MIZUK	16	PRL 117 142001	R. Mizuk *et al.*	(BELLE Collab.)	REFID=57465
	KROKOVNY	13	PR D88 052016	P. Krokovny *et al.*	(BELLE Collab.)	REFID=55588
	BONDAR	12	PRL 108 122001	A. Bondar *et al.*	(BELLE Collab.)	REFID=53963

NODE=M208

$X(10650)^{\pm}$

$I^G(J^P) = ?^+(1^+)$

OMITTED FROM SUMMARY TABLE

Observed by BONDAR 12 in $\Upsilon(5S)$ decays to $\Upsilon(\text{nS})\pi^+\pi^-$ (n = 1, 2, 3) and $h_b(\text{mP})\pi^+\pi^-$ (m = 1, 2). $J^P = 1^+$ is favored from angular analyses.

NODE=M208

$X(10650)^{\pm}$ BRANCHING RATIOS

NODE=M208225

$\Gamma(h_b(1P)\pi^+)/\Gamma_{total}$ — Γ_4/Γ

NODE=M208R04
NODE=M208R04

VALUE (units 10^{-2})	DOCUMENT ID		TECN	COMMENT
$\mathbf{8.41^{+2.43+1.49}_{-2.12-1.06}}$	[10] GARMASH	16	BELL	$e^+e^- \to \pi^- B^{*+}\overline{B}^{*0}$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
YOUR DATA seen	[11] MIZUK	16	BELL	$e^+e^- \to h_b(1P)\pi^+\pi^-$
seen	[12] BONDAR	12	BELL	$e^+e^- \to h_b(1P)\pi^+\pi^-$

[10] Assuming the $X(10650)^\pm$ decay width is saturated by the channels $\pi^+ \Upsilon(1S,2S,3S)$, $\pi^+ h_b(1P,2P)$, and $B^{*+}\overline{B}^{*0}$, and using the results from BONDAR 12 and MIZUK 16. NODE=M208R04;LINKAGE=C

YOUR NOTE [11] Using e^+e^- energies near the $\Upsilon(11020)$. NODE=M208R04;LINKAGE=A

[12] Using e^+e^- energies near the $\Upsilon(10860)$. NODE=M208R04;LINKAGE=B

$\Gamma(h_b(2P)\pi^+)/\Gamma_{total}$ — Γ_5/Γ

NODE=M208R05
NODE=M208R05

VALUE (units 10^{-2})	DOCUMENT ID		TECN	COMMENT
$\mathbf{14.7^{+3.2+2.8}_{-2.8-2.3}}$	[13] GARMASH	16	BELL	$e^+e^- \to \pi^- B^{*+}\overline{B}^{*0}$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
YOUR DATA possibly seen	[14] MIZUK	16	BELL	$e^+e^- \to h_b(2P)\pi^+\pi^-$
seen	[15] BONDAR	12	BELL	$e^+e^- \to h_b(2P)\pi^+\pi^-$

[13] Assuming the $X(10650)^\pm$ decay width is saturated by the channels $\pi^+ \Upsilon(1S,2S,3S)$, $\pi^+ h_b(1P,2P)$, and $B^{*+}\overline{B}^{*0}$, and using the results from BONDAR 12 and MIZUK 16. NODE=M208R05;LINKAGE=C

YOUR NOTE [14] Using e^+e^- energies near the $\Upsilon(11020)$. NODE=M208R05;LINKAGE=A

[15] Using e^+e^- energies near the $\Upsilon(10860)$. NODE=M208R05;LINKAGE=B

$X(10650)^\pm$ REFERENCES

NODE=M208

YOUR PAPER

GARMASH	16	PRL 116 212001	A. Garmash *et al.*	(BELLE Collab.)	REFID=57446
MIZUK	16	PRL 117 142001	R. Mizuk *et al.*	(BELLE Collab.)	REFID=57465
BONDAR	12	PRL 108 122001	A. Bondar *et al.*	(BELLE Collab.)	REFID=53963

NODE=M092

$\Upsilon(10860)$

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

$\Upsilon(10860)$ MASS

NODE=M092M

NODE=M092M

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT	
$\mathbf{10889.9^{+\ 3.2}_{-\ 2.6}}$ **OUR AVERAGE**					
YOUR DATA $10884.7^{+\ 3.6+8.9}_{-\ 3.4-1.0}$	[1] MIZUK	16	BELL	$e^+e^- \to h_b(1P,2P)\pi^+\pi^-$	
$10891.1\pm\ 3.2^{+1.2}_{-2.0}$	[2] SANTEL	16	BELL	$e^+e^- \to \Upsilon(1S,2S,3S)\pi^+\pi^-$	OCCUR=2
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$10881.8^{+\ 1.0}_{-\ 1.1}\pm1.2$	[3,4] SANTEL	16	BELL	$e^+e^- \to$ hadrons	
$10879\ \pm\ 3$	[5,6] CHEN	10	BELL	$e^+e^- \to$ hadrons	
$10888.4^{+\ 2.7}_{-\ 2.6}\pm1.2$	[7] CHEN	10	BELL	$e^+e^- \to \Upsilon(1S,2S,3S)\pi^+\pi^-$	OCCUR=2
$10876\ \pm\ 2$	[5] AUBERT	09E	BABR	$e^+e^- \to$ hadrons	
$10869\ \pm\ 2$	[8] AUBERT	09E	BABR	$e^+e^- \to$ hadrons	OCCUR=2
$10868\ \pm\ 6\ \pm5$	[9] BESSON	85	CLEO	$e^+e^- \to$ hadrons	
$10845\ \pm20$	[10] LOVELOCK	85	CUSB	$e^+e^- \to$ hadrons	

YOUR NOTE [1] From a simultaneous fit to the $h_b(nP)\pi^+\pi^-$, $n = 1, 2$ cross sections at 22 energy points within $\sqrt{s} = 10.77$–11.02 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with eight resonance parameters (a mass and width for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, a single relative phase, a single relative amplitude, and two overall normalization factors, one for each n). The systematic error estimate is dominated by possible interference with a small nonresonant continuum amplitude. NODE=M092M;LINKAGE=D

[2] From a simultaneous fit to the $\Upsilon(nS)\pi^+\pi^-$, $n = 1, 2, 3$ cross sections at 25 energy points within $\sqrt{s} = 10.6$–11.05 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with fourteen resonance parameters (a mass, width, and three amplitudes for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, a single universal relative phase, and three decoherence coefficients, one for each n). Continuum contributions were measured (and therefore fixed) to be zero. NODE=M092M;LINKAGE=C

[3] From a fit to the total hadronic cross sections measured at 60 energy points within $\sqrt{s} = 10.82$–11.05 GeV to a pair of interfering Breit-Wigner amplitudes and two floating continuum amplitudes with $1/\sqrt{s}$ dependence, one coherent with the resonances and NODE=M092M;LINKAGE=A

one incoherent, with six resonance parameters (a mass, width, and an amplitude for each of Υ(10860) and Υ(11020), one relative phase, and one decoherence coefficient).

4 Not including uncertain and potentially large systematic errors due to assumed continuum amplitude $1/\sqrt{s}$ dependence and related interference contributions. NODE=M092M;LINKAGE=B

5 In a model where a flat non-resonant $b\overline{b}$-continuum is incoherently added to a second flat component interfering with two Breit-Wigner resonances. Systematic uncertainties not estimated. NODE=M092M;LINKAGE=AU

6 The parameters of the Υ(11020) are fixed to those in AUBERT 09E. NODE=M092M;LINKAGE=CH

7 In a model where a flat nonresonant Υ(1S, 2S, 3S)$\pi^+\pi^-$ continuum interferes with a single Breit-Wigner resonance. NODE=M092M;LINKAGE=CE

8 In a model where a non-resonant $b\overline{b}$-continuum represented by a threshold function at $\sqrt{s}$=2m_B is incoherently added to a flat component interfering with two Breit-Wigner resonances. Not independent of other AUBERT 09E results. Systematic uncertainties not estimated. NODE=M092M;LINKAGE=UB

9 Assuming four Gaussians with radiative tails and a single step in R. NODE=M092M;LINKAGE=BE

10 In a coupled-channel model with three resonances and a smooth step in R. NODE=M092M;LINKAGE=LO

Υ(10860) WIDTH

NODE=M092W

NODE=M092W

	VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*	
	51 $^{+6}_{-7}$ OUR AVERAGE					
YOUR DATA	40.6 $^{+12.7}_{-8.0}$ $^{+1.1}_{-19.1}$	[11] MIZUK	16	BELL	$e^+e^- \rightarrow h_b$(1P, 2P)$\pi^+\pi^-$	
	53.7 $^{+7.1}_{-5.6}$ $^{+1.3}_{-5.4}$	[12] SANTEL	16	BELL	$e^+e^- \rightarrow \Upsilon$(1S, 2S, 3S)$\pi^+\pi^-$	OCCUR=2
	• • • We do not use the following data for averages, fits, limits, etc. • • •					
	48.5 $^{+1.9}_{-1.8}$ $^{+2.0}_{-2.8}$	[13,14] SANTEL	16	BELL	$e^+e^- \rightarrow$ hadrons	
	46 $^{+9}_{-7}$	[15,16] CHEN	10	BELL	$e^+e^- \rightarrow$ hadrons	
	30.7 $^{+8.3}_{-7.0}$ $\pm$ 3.1	[17] CHEN	10	BELL	$e^+e^- \rightarrow \Upsilon$(1S, 2S, 3S)$\pi^+\pi^-$	OCCUR=2
	43 $\pm$ 4	[15] AUBERT	09E	BABR	$e^+e^- \rightarrow$ hadrons	
	74 $\pm$ 4	[18] AUBERT	09E	BABR	$e^+e^- \rightarrow$ hadrons	OCCUR=2
	112 $\pm$17 $\pm$23	[19] BESSON	85	CLEO	$e^+e^- \rightarrow$ hadrons	
	110 $\pm$15	[20] LOVELOCK	85	CUSB	$e^+e^- \rightarrow$ hadrons	

YOUR NOTE

11 From a simultaneous fit to the h_b(nP)$\pi^+\pi^-$, n = 1, 2 cross sections at 22 energy points within $\sqrt{s}$ = 10.77–11.02 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with eight resonance parameters (a mass and width for each of Υ(10860) and Υ(11020), a single relative phase, a single relative amplitude, and two overall normalization factors, one for each n). The systematic error estimate is dominated by possible interference with a small nonresonant continuum amplitude. NODE=M092W;LINKAGE=D

12 From a simultaneous fit to the Υ(nS)$\pi^+\pi^-$, n = 1, 2, 3 cross sections at 25 energy points within $\sqrt{s}$ = 10.6–11.05 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with fourteen resonance parameters (a mass, width, and three amplitudes for each of Υ(10860) and Υ(11020), a single universal relative phase, and three decoherence coefficients, one for each n). Continuum contributions were measured (and therefore fixed) to be zero. NODE=M092W;LINKAGE=C

13 From a fit to the total hadronic cross sections measured at 60 energy points within $\sqrt{s}$ = 10.82–11.05 GeV to a pair of interfering Breit-Wigner amplitudes and two floating continuum amplitudes with $1/\sqrt{s}$ dependence, one coherent with the resonances and one incoherent, with six resonance parameters (a mass, width, and an amplitude for each of Υ(10860) and Υ(11020), one relative phase, and one decoherence coefficient). NODE=M092W;LINKAGE=A

14 Not including uncertain and potentially large systematic errors due to assumed continuum amplitude $1/\sqrt{s}$ dependence and related interference contributions. NODE=M092W;LINKAGE=B

15 In a model where a flat non-resonant $b\overline{b}$-continuum is incoherently added to a second flat component interfering with two Breit-Wigner resonances. Systematic uncertainties not estimated. NODE=M092W;LINKAGE=AU

16 The parameters of the Υ(11020) are fixed to those in AUBERT 09E. NODE=M092W;LINKAGE=CH

17 In a model where a flat nonresonant Υ(1S, 2S, 3S)$\pi^+\pi^-$ continuum interferes with a single Breit-Wigner resonance. NODE=M092W;LINKAGE=CE

18 In a model where a non-resonant $b\overline{b}$-continuum represented by a threshold function at $\sqrt{s}$=2m_B is incoherently added to a flat component interfering with two Breit-Wigner resonances. Not independent of other AUBERT 09E results. Systematic uncertainties not estimated. NODE=M092W;LINKAGE=UB

19 Assuming four Gaussians with radiative tails and a single step in R. NODE=M092W;LINKAGE=BE

20 In a coupled-channel model with three resonances and a smooth step in R. NODE=M092W;LINKAGE=LO

$\Upsilon(10860)$ BRANCHING RATIOS

NODE=M092230

NODE=M092230

"OUR EVALUATION" is obtained based on averages of rescaled data listed below. The averages and rescaling were performed by the Heavy Flavor Averaging Group (HFAG) and are described at http://www.slac.stanford.edu/xorg/hfag/.

$\Gamma(h_b(1P)\pi^+\pi^-)/\Gamma(h_b(2P)\pi^+\pi^-)$ — Γ_{21}/Γ_{22}

NODE=M092R00
NODE=M092R00

	VALUE	DOCUMENT ID		TECN	COMMENT
YOUR DATA	**0.616±0.052±0.017**	MIZUK	16	BELL	$e^+e^- \to h_b(1P,2P)\pi^+\pi^-$

$\Upsilon(10860)$ REFERENCES

NODE=M092

YOUR PAPER

MIZUK	16	PRL 117 142001	R. Mizuk *et al.*	(BELLE Collab.)
SANTEL	16	PR D93 011101	D. Santel *et al.*	(BELLE Collab.)
CHEN	10	PR D82 091106	K.-F. Chen *et al.*	(BELLE Collab.)
AUBERT	09E	PRL 102 012001	B. Aubert *et al.*	(BABAR Collab.)
BESSON	85	PRL 54 381	D. Besson *et al.*	(CLEO Collab.)
LOVELOCK	85	PRL 54 377	D.M.J. Lovelock *et al.*	(CUSB Collab.)

REFID=57465
REFID=57121
REFID=53531
REFID=52661
REFID=22368
REFID=22369

NODE=M093

$\Upsilon(11020)$

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

$\Upsilon(11020)$ MASS

NODE=M093M

NODE=M093M

	VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
	$10992.9^{+10.0}_{-3.1}$ OUR AVERAGE				
YOUR DATA	$10999.0^{+7.3}_{-7.8}{}^{+16.9}_{-1.0}$	[1] MIZUK	16	BELL	$e^+e^- \to h_b(1P,2P)\pi^+\pi^-$
	$10987.5^{+6.4}_{-2.5}{}^{+9.1}_{-2.3}$	[2] SANTEL	16	BELL	$e^+e^- \to \Upsilon(1S,2S,3S)\pi^+\pi^-$
	• • • We do not use the following data for averages, fits, limits, etc. • • •				
	$11003.0 \pm 1.1^{+0.9}_{-1.0}$	[3,4] SANTEL	16	BELL	$e^+e^- \to$ hadrons
	10996 ± 2	[5] AUBERT	09E	BABR	$e^+e^- \to$ hadrons
	$11019 \pm 5 \pm 7$	BESSON	85	CLEO	$e^+e^- \to$ hadrons
	11020 ± 30	LOVELOCK	85	CUSB	$e^+e^- \to$ hadrons

OCCUR=2

YOUR NOTE

[1] From a simultaneous fit to the $h_b(nP)\pi^+\pi^-$, $n = 1, 2$ cross sections at 22 energy points within $\sqrt{s} = 10.77$–11.02 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with eight resonance parameters (a mass and width for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, a single relative phase, a single relative amplitude, and two overall normalization factors, one for each n). The systematic error estimate is dominated by possible interference with a small nonresonant continuum amplitude.

NODE=M093M;LINKAGE=D

[2] From a simultaneous fit to the $\Upsilon(nS)\pi^+\pi^-$, $n = 1, 2, 3$ cross sections at 25 energy points within $\sqrt{s} = 10.6$–11.05 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with fourteen resonance parameters (a mass, width, and three amplitudes for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, a single universal relative phase, and three decoherence coefficients, one for each n). Continuum contributions were measured (and therefore fixed) to be zero.

NODE=M093M;LINKAGE=C

[3] From a fit to the total hadronic cross sections measured at 60 energy points within $\sqrt{s} = 10.82$–11.05 GeV to a pair of interfering Breit-Wigner amplitudes and two floating continuum amplitudes with $1/\sqrt{s}$ dependence, one coherent with the resonances and one incoherent, with six resonance parameters (a mass, width, and an amplitude for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, one relative phase, and one decoherence coefficient).

NODE=M093M;LINKAGE=A

[4] Not including uncertain and potentially large systematic errors due to assumed continuum amplitude $1/\sqrt{s}$ dependence and related interference contributions.

NODE=M093M;LINKAGE=B

[5] In a model where a flat non-resonant $b\bar{b}$-continuum is incoherently added to a second flat component interfering with two Breit-Wigner resonances. Systematic uncertainties not estimated.

NODE=M093M;LINKAGE=AU

$\Upsilon(11020)$ WIDTH

NODE=M093W

NODE=M093W

	VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
	49^{+9}_{-15} OUR AVERAGE				
YOUR DATA	$27^{+27}_{-11}{}^{+5}_{-12}$	[6] MIZUK	16	BELL	$e^+e^- \to h_b(1P,2P)\pi^+\pi^-$
	$61^{+9}_{-19}{}^{+2}_{-20}$	[7] SANTEL	16	BELL	$e^+e^- \to \Upsilon(1S,2S,3S)\pi^+\pi^-$

OCCUR=2

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

$39.3^{+1.7+1.3}_{-1.6-2.4}$	[8,9] SANTEL	16	BELL	$e^+e^- \rightarrow$ hadrons
37 ± 3	[10] AUBERT	09E	BABR	$e^+e^- \rightarrow$ hadrons
61 ±13 ±22	BESSON	85	CLEO	$e^+e^- \rightarrow$ hadrons
90 ±20	LOVELOCK	85	CUSB	$e^+e^- \rightarrow$ hadrons

YOUR NOTE

[6] From a simultaneous fit to the $h_b(\text{nP})\pi^+\pi^-$, $n = 1$, 2 cross sections at 22 energy points within $\sqrt{s}$ = 10.77–11.02 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with eight resonance parameters (a mass and width for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, a single relative phase, a single relative amplitude, and two overall normalization factors, one for each n). The systematic error estimate is dominated by possible interference with a small nonresonant continuum amplitude. NODE=M093W;LINKAGE=D

[7] From a simultaneous fit to the $\Upsilon(\text{nS})\pi^+\pi^-$, n=1, 2, 3 cross sections at 25 energy points within $\sqrt{s}$ = 10.6–11.05 GeV to a pair of interfering Breit-Wigner amplitudes modified by phase space factors, with fourteen resonance parameters (a mass, width, and three amplitudes for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, a single universal relative phase, and three decoherence coefficients, one for each n). Continuum contributions were measured (and therefore fixed) to be zero. NODE=M093W;LINKAGE=C

[8] From a fit to the total hadronic cross sections measured at 60 energy points within $\sqrt{s}$ = 10.82–11.05 GeV to a pair of interfering Breit-Wigner amplitudes and two floating continuum amplitudes with $1/\sqrt{s}$ dependence, one coherent with the resonances and one incoherent, with six resonance parameters (a mass, width, and an amplitude for each of $\Upsilon(10860)$ and $\Upsilon(11020)$, one relative phase, and one decoherence coefficient). NODE=M093W;LINKAGE=A

[9] Not including uncertain and potentially large systematic errors due to assumed continuum amplitude $1/\sqrt{s}$ dependence and related interference contributions. NODE=M093W;LINKAGE=B

[10] In a model where a flat non-resonant $b\overline{b}$-continuum is incoherently added to a second flat component interfering with two Breit-Wigner resonances. Systematic uncertainties not estimated. NODE=M093W;LINKAGE=AU

Υ(11020) REFERENCES

NODE=M093

YOUR PAPER

MIZUK	16	PRL 117 142001	R. Mizuk *et al.*	(BELLE Collab.)	REFID=57465
SANTEL	16	PR D93 011101	D. Santel *et al.*	(BELLE Collab.)	REFID=57121
AUBERT	09E	PRL 102 012001	B. Aubert *et al.*	(BABAR Collab.)	REFID=52661
BESSON	85	PRL 54 381	D. Besson *et al.*	(CLEO Collab.)	REFID=22368
LOVELOCK	85	PRL 54 377	D.M.J. Lovelock *et al.*	(CUSB Collab.)	REFID=22369