

Reference = ABLIKIM 14Q; PR D90 092002
Verifier code = BES3

PLEASE READ NOW

*PLEASE
REPLY
WITHIN
ONE WEEK*

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

Xiao-Rui Lyu

EMAIL: xiaorui@ucas.ac.cn

July 21, 2016

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

$c\bar{c}$ MESONS

$J/\psi(1S)$

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

NODE=MXXX025

NODE=M070

$J/\psi(1S)$ BRANCHING RATIOS

NODE=M070230

NODE=M070315

———— CHARGE CONJUGATION (C), PARITY (P), ————
———— LEPTON FAMILY NUMBER (LF) VIOLATING MODES ————

$\Gamma(\gamma\gamma)/\Gamma_{\text{total}}$ Γ_{222}/Γ

NODE=M070R80
NODE=M070R80

	VALUE (units 10^{-7})	CL%	DOCUMENT ID	TECN	COMMENT
YOUR DATA	< 2.7	90	ABLIKIM	14Q BES3	$\psi(2S) \rightarrow \pi^+\pi^- J/\psi$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
	< 50	90	ADAMS	08 CLEO	$\psi(2S) \rightarrow \pi^+\pi^- J/\psi$
	<1600	90	¹ WICHT	08 BELL	$B^\pm \rightarrow K^\pm \gamma\gamma$
	< 220	90	ABLIKIM	07J BES2	$\psi(2S) \rightarrow J/\psi \pi^+\pi^-$
	<5000	90	BARTEL	77 CNTR	e^+e^-

¹WICHT 08 reports $[\Gamma(J/\psi(1S) \rightarrow \gamma\gamma)/\Gamma_{\text{total}}] \times [B(B^+ \rightarrow J/\psi(1S)K^+)] < 0.16 \times 10^{-6}$ which we divide by our best value $B(B^+ \rightarrow J/\psi(1S)K^+) = 1.026 \times 10^{-3}$.

NODE=M070R80;LINKAGE=WI

$\Gamma(\gamma\phi)/\Gamma_{\text{total}}$ Γ_{223}/Γ

NODE=M070S95
NODE=M070S95

	VALUE	CL%	DOCUMENT ID	TECN	COMMENT
YOUR DATA	<1.4 x 10 ⁻⁶	90	ABLIKIM	14Q BES3	$\psi(2S) \rightarrow \pi^+\pi^- J/\psi$

$J/\psi(1S)$ REFERENCES

NODE=M070

YOUR PAPER	ABLIKIM	14Q	PR D90 092002	M. Ablikim <i>et al.</i>	(BES III Collab.)
	ADAMS	08	PRL 101 101801	G.S. Adams <i>et al.</i>	(CLEO Collab.)
	WICHT	08	PL B662 323	J. Wicht <i>et al.</i>	(BELLE Collab.)
	ABLIKIM	07J	PR D76 117101	M. Ablikim <i>et al.</i>	(BES Collab.)
	BARTEL	77	PL 66B 489	W. Bartel <i>et al.</i>	(DESY, HEIDP)

REFID=56238
REFID=52261
REFID=52204
REFID=52072
REFID=22058