Reference = CHILIKIN 14; PR D90 112009
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

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
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Prospekt Lavrent'eva 11
RU-630090 Novosibirsk
Russian Federation

EMAIL: simon.eidelman@cern.ch

$c\overline{c}$ MESONS

NODE=MXXX025

NODE=M231

$X(4200)^{\pm}$

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

OMITTED FROM SUMMARY TABLE

Reported by CHILIKIN 14 in $J/\psi\pi^+$ at a significance of 6.2σ. Assignments of 0^-, 1^-, 2^-, and 2^+ excluded at 6.1σ, 7.4σ, 4.4σ, and 7.0σ level, respectively. Needs confirmation. NODE=M231

$X(4200)^{\pm}$ MASS

NODE=M231M

	VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
YOUR DATA	4196^{+31+17}_{-29-13}	CHILIKIN	14	BELL	$\overline{B}^0 \to J/\psi K^- \pi^+$

NODE=M231M

$X(4200)^{\pm}$ WIDTH

NODE=M231W

	VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
YOUR DATA	$370 \pm 70^{+70}_{-132}$	CHILIKIN	14	BELL	$\overline{B}^0 \to J/\psi K^- \pi^+$

NODE=M231W

$X(4200)^{\pm}$ BRANCHING RATIOS

NODE=M231220

$\Gamma(J/\psi\pi^+)/\Gamma_{total}$ — Γ_1/Γ

NODE=M231R01

	VALUE	DOCUMENT ID		TECN	COMMENT
YOUR DATA	seen	CHILIKIN	14	BELL	$\overline{B}^0 \to J/\psi K^- \pi^+$

NODE=M231R01

$X(4200)^{\pm}$ REFERENCES

NODE=M231

YOUR PAPER CHILIKIN 14 PR D90 112009 K. Chilikin *et al.* (BELLE Collab.) REFID=56344

NODE=M195

$X(4430)^{\pm}$

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

First seen by CHOI 08 in $B \to K\pi^+\psi(2S)$ decays, confirmed by AAIJ 14AG, and confirmed in a model-independent way by AAIJ 15BH. Also seen by CHILIKIN 14 in $B \to K^+\pi J/\psi$ decays. J^P was determined by CHILIKIN 13 and AAIJ 14AG. NODE=M195

$X(4430)^{\pm}$ BRANCHING RATIOS

NODE=M195225

$\Gamma(\pi^+ J/\psi)/\Gamma_{total}$ — Γ_2/Γ

NODE=M195R02

	VALUE	DOCUMENT ID		TECN	COMMENT
YOUR DATA	seen	[1] CHILIKIN	14	BELL	$\overline{B}^0 \to K^- \pi^+ J/\psi$

NODE=M195R02

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

not seen	[2] AUBERT	09AA	BABR	$B \to K\pi^+ J/\psi$

YOUR NOTE

[1] CHILIKIN 14 reports $B(\overline{B}^0 \to X(4430)^+ K^-) \times B(X(4430)^+ \to J/\psi\pi^+) = (5.4^{+4.0}_{-1.0}{}^{+1.1}_{-0.9}) \times 10^{-6}$. NODE=M195R02;LINKAGE=A

[2] AUBERT 09AA quotes $B(B^+ \to \overline{K}^0 X(4430)^+) \times B(X(4430)^+ \to \pi^+ J/\psi) < 1.5 \times 10^{-5}$ and $B(\overline{B}^0 \to K^- X(4430)^+) \times B(X(4430)^+ \to \pi^+ J/\psi) < 0.4 \times 10^{-5}$ at 95% CL. NODE=M195R02;LINKAGE=AU

$X(4430)^{\pm}$ REFERENCES

NODE=M195

	AAIJ	15BH	PR D92 112009	R. Aaij *et al.*	(LHCb Collab.)	REFID=57110
	AAIJ	14AG	PRL 112 222002	R. Aaij *et al.*	(LHCb Collab.) JP	REFID=55896
YOUR PAPER	CHILIKIN	14	PR D90 112009	K. Chilikin *et al.*	(BELLE Collab.)	REFID=56344
	CHILIKIN	13	PR D88 074026	K. Chilikin *et al.*	(BELLE Collab.) JP	REFID=55551
	AUBERT	09AA	PR D79 112001	B. Aubert *et al.*	(BABAR Collab.)	REFID=52940
	CHOI	08	PRL 100 142001	S.-K. Choi *et al.*	(BELLE Collab.)	REFID=52178