

Reference = LEES 15C; PR D91 052002
Verifier code = BABAR

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.

Fabio Anulli

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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

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CHARMED, STRANGE MESONS ($C = S = \pm 1$)

$$D_s^+ = c\bar{s}, D_s^- = \bar{c}s, \quad \text{similarly for } D_s^{*'}s$$

$$D_{s1}^*(2700)^\pm$$

$$I(J^P) = 0(1^-)$$

NODE=MXXX040

NODE=MXXX040

NODE=M182

$D_{s1}^*(2700)^+$ MASS

NODE=M182M

NODE=M182M

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
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2708.3^{+4.0}_{-3.4} OUR AVERAGE

YOUR DATA	2699	$+14$ -7		1 LEES	15C BABR	$B \rightarrow D D^0 K^+$
	2709.2 $\pm$ 1.9 $\pm$ 4.5	52k		2 AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
	2710 $\pm$ 2	$+12$ -7	10.4k	3 AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
	2708 $\pm$ 9	$+11$ -10	182	BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$

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

YOUR DATA	2694 $\pm$ 8	$+13$ -3		LEES	15C BABR	$B^0 \rightarrow D^- D^0 K^+$
YOUR DATA	2707 $\pm$ 8 $\pm$ 8			LEES	15C BABR	$B^+ \rightarrow \bar{D}^0 D^0 K^+$
	2688 $\pm$ 4 $\pm$ 3			4 AUBERT,BE	06E BABR	10.6 $e^+ e^- \rightarrow DKX$

OCCUR=2

OCCUR=3

YOUR NOTE	¹ From a combined analysis of $B^0 \rightarrow D^- D^0 K^+$ and $B^+ \rightarrow \bar{D}^0 D^0 K^+$. ² From the combined fit of the $D^+ K_S^0$ and $D^0 K^+$ modes in the model including the $D_{s2}^*(2573)^+$, $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$. ³ From simultaneous fits to the two DK mass spectra and to the total $D^* K$ mass spectrum. ⁴ Superseded by AUBERT 09AR.					
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NODE=M182M;LINKAGE=B
NODE=M182M;LINKAGE=AA

NODE=M182M;LINKAGE=AB
NODE=M182M;LINKAGE=AU

$D_{s1}^*(2700)^+$ WIDTH

NODE=M182W

NODE=M182W

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
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122 $+11$ ₋₈ OUR AVERAGE

YOUR DATA	127	$+24$ -10		5 LEES	15C BABR	$B \rightarrow D D^0 K^+$
	115.8 $\pm$ 7.3 $\pm$ 12.1	52k		6 AAIJ	12AU LHCB	$pp \rightarrow (DK)^+ X$ at 7 TeV
	149 $\pm$ 7	$+39$ -52	10.4k	7 AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
	108 $\pm$ 23	$+36$ -31	182	BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$

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

YOUR DATA	145 $\pm$ 24	$+22$ -14		LEES	15C BABR	$B^0 \rightarrow D^- D^0 K^+$
YOUR DATA	113 $\pm$ 21	$+20$ -16		LEES	15C BABR	$B^+ \rightarrow \bar{D}^0 D^0 K^+$
	112 $\pm$ 7 $\pm$ 36			8 AUBERT,BE	06E BABR	10.6 $e^+ e^- \rightarrow DKX$

OCCUR=2

OCCUR=3

YOUR NOTE	⁵ From a combined analysis of $B^0 \rightarrow D^- D^0 K^+$ and $B^+ \rightarrow \bar{D}^0 D^0 K^+$. ⁶ From the combined fit of the $D^+ K_S^0$ and $D^0 K^+$ modes in the model including the $D_{s2}^*(2573)^+$, $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$. ⁷ From simultaneous fits to the two DK mass spectra and to the total $D^* K$ mass spectrum. ⁸ Superseded by AUBERT 09AR.					
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NODE=M182W;LINKAGE=A
NODE=M182W;LINKAGE=AA

NODE=M182W;LINKAGE=AB
NODE=M182W;LINKAGE=AU

$D_{s1}^*(2700)^\pm$ REFERENCES

NODE=M182

YOUR PAPER	LEES	15C	PR D91 052002	J.P. Lees <i>et al.</i>	(BABAR Collab.)
	AAIJ	12AU	JHEP 1210 151	R. Aaij <i>et al.</i>	(LHCb Collab.)
	AUBERT	09AR	PR D80 092003	B. Aubert <i>et al.</i>	(BABAR Collab.)
	BRODZICKA	08	PRL 100 092001	J. Brodzicka <i>et al.</i>	(BELLE Collab.)
	AUBERT,BE	06E	PRL 97 222001	B. Aubert <i>et al.</i>	(BABAR Collab.)

REFID=56412
REFID=54735
REFID=53135
REFID=52144
REFID=51512