

MEAN MATRICES AND CONDITIONAL NEGATIVITY*

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To R. B. Bapat on his sixtieth birthday

Abstract. In earlier papers R. Bhatia and H. Kosaki have shown that certain matrices associated with means are infinitely divisible. In this paper it is shown that many of them possess a stronger property: their Hadamard reciprocals have exactly one positive eigenvalue.

Key words. Positive definite matrix, conditionally negative definite matrix, infinitely divisible matrix, Hadamard inverse, means.

AMS subject classifications. 15A57, 15B57, 15A48

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