

MATRICES WITH TOTALLY POSITIVE POWERS AND THEIR GENERALIZATIONS

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Abstract. In this paper, eventually totally positive matrices (i.e. matrices all whose powers starting at some point are totally positive) are studied. We present a new approach to eventual total positivity which is based on the theory of eventually positive matrices. We mainly focus on the spectral properties of such matrices. We also study eventually J-sign-symmetric matrices and matrices, whose powers are P -matrices.

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