SPECTRAL PERTURBATION BY RANK m MATRICES

JONATHAN L. MERZEL, JÁN MINÁČ, TUNG T. NGUYEN
AND FEDERICO W. PASINI

Abstract. Let A and B designate $n \times n$ matrices with coefficients in a field F. In this paper, we completely answer the following question: For A fixed, what are the possible characteristic polynomials of $A + B$, where B ranges over matrices of rank $\leqslant m$?

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www.ele-math.com
oam@ele-math.com