ELA

http://math.technion.ac.il/iic/ela

ON LOW RANK PERTURBATIONS OF COMPLEX MATRICES AND SOME DISCRETE METRIC SPACES*

LEV GLEBSKY[†] AND LUIS MANUEL RIVERA[‡]

Abstract. In this article, several theorems on perturbations of a complex matrix by a matrix of a given rank are presented. These theorems may be divided into two groups. The first group is about spectral properties of a matrix under such perturbations; the second is about almost-near relations with respect to the rank distance.

Key words. Complex matrices, Rank, Perturbations.

AMS subject classifications. 15A03, 15A18.