Meeting: 1003, Atlanta, Georgia, SS 25A, AMS Special Session on Complex and Functional Analysis, I

1003-47-64 **Morteza Seddighin*** (mseddigh@indiana.edu), Mathematics Department, Indiana University East, 2325 Chester Blvd., Richmond, IN. *On the eigenvalues which express the antieigenvalue.*

It is already proven by the author and Karl Gustafson that the first antieigenvalue of an accretive compact normal operator can be expressed either by a pair of (unknown) eigenvalues or by a single (unknown) eigenvalue of the operator. In this paper we pin down the eigenvalues of T that expresses first antieigenvalue and the components of the first antieigenvectors. In addition we will prove that the expressions that state the first antieigenvalue and components of the first antieigenvectors are well defined. Finally, based on these new results we will develop an algorithm for computing higher antieigenvalues. (Received July 28, 2004)