## 1128-32-133 Sivaguru Ravisankar and Yunus E. Zeytuncu\* (zeytuncu@umich.edu), 4901 Evergreen Road, Dearborn, MI 48128. Friedrichs Operator on Pseudoconvex Domains in $\mathbb{C}^n$ .

Let  $\Omega$  be a smooth bounded domain in  $\mathbb{C}^n$  and let  $L^2(\Omega)$  denote the space of square integrable functions on  $\Omega$  with respect to the Lebesgue measure. We denote the subspace of holomorphic functions in  $L^2(\Omega)$  by  $A^2(\Omega)$  and the Bergman projection from  $L^2(\Omega)$  to  $A^2(\Omega)$  by **B**.

The Friedrichs operator T is a conjugate linear mapping from  $A^2(\Omega)$  onto itself, defined by  $f \to \mathbf{B}(\overline{f})$ . It was recently observed that this operator exhibits some additional smoothing properties under certain geometric assumptions on the domain. In this talk, after a quick review these results, we will prove that T is compact on any pseudoconvex domain without any further geometric conditions. We will also discuss some further implications of this observation. (Received February 22, 2017)