COMPLEX ANALYSIS SEMINAR

LOCALIZATION OF COMPACTNESS OF HANKEL OPERATORS

Sonmez Sahutoglu

University of Toledo

ABSTRACT: We prove the following localization for compactness of Hankel operators on Bergman spaces. Assume that Ω is a bounded pseudoconvex domain in \mathbb{C}^n , p is a boundary point of Ω , and B(p,r) is a ball centered at p with radius r so that $U = \Omega \cap B(p,r)$ is a domain. We show that if the Hankel operator H_{ϕ} with symbol $\phi \in C^1(\overline{\Omega})$ is compact on $A^2(\Omega)$ then $H_{R(\phi)}$ is compact on $A^2(U)$ where $R(\phi)$ denotes the restriction of ϕ on U, and $A^2(\Omega)$ and $A^2(U)$ denote the Bergman spaces on Ω and U, respectively.

Date: Thursday, January 27, 2011 Time: 4pm-5pm Place: UH 4440

Webpage: http://math.utoledo.edu/~sonmez/complexseminar.html