COMPLEX ANALYSIS SEMINAR

COMPACTNESS OF THE $\overline{\partial}$-NEUMANN PROBLEM AND HANKEL OPERATORS

Mehmet Çelik

University of North Texas at Dallas

ABSTRACT: It is known that on a bounded pseudoconvex domain, the compactness of the $\overline{\partial}$-Neumann operator implies the compactness of the commutators between the Bergamn projections and multiplication operators, those commutators are actually the Hankel operators. The interest is to see to what extend properties of the commutators can be used to characterize compactness properties of the $\overline{\partial}$-Neumann problem. In this talk we will present some observations between the compactness properties of these operators on a smooth bounded domain. This is joint work with Sonmez Sahutoglu.

Date: Thursday, March 31, 2011

Time: 4pm-5pm

Place: UH 4440

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