Temple University Mathematics Colloquium

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Georgetown University

will speak on

Estimates for the Cauchy-Riemannian Equation in Several Complex Variables

ABSTRACT: Let $\Omega \subset\subset \mathbb{C}^{n+1}$ be a bounded, pseudoconvex domain of finite type with smooth boundary. We assume further that the Levi form of $\partial\Omega$ is diagonalizable. In this talk, we give detailed discussion of recent progress of the $\bar{\partial}$-Neumann problem. Using this result, we obtain solving operator for inhomogeneous Cauchy-Riemann equation $\bar{\partial}U = f$ in Ω. Here $f = \sum_{j=1}^{n+1} f_j \bar{\omega}$ is a given $(0,1)$-form. Then we discuss the "possible" optimal estimates of the solution.

Monday, 24 October 2011
Lecture at 4:00 pm
Coffee, tea, and refreshments from 3:30-5:00 pm
Room 617, Wachman Building
Department of Mathematics