Temple University Mathematics Colloquium

Siqi Fu

Rutgers University (Camden)

will speak on

Spectral Theory of the $\bar{\partial}$-Neumann Laplacian and Applications

ABSTRACT: The $\bar{\partial}$-Neumann Laplacian is an elliptic operator with non-coercive boundary conditions in several complex variables. In this talk, I will discuss interplays between spectral behavior of the $\bar{\partial}$-Neumann Laplacian and the underlying geometry. In particular, I will talk about the recent joint work with Boyong Chen in which spectral theory of the $\bar{\partial}$-Neumann Laplacian is used to establish stability of the Bergman kernel on a tower of coverings of complex manifolds.

Wednesday, February 22, 2012
Lecture at 12:00 pm
Coffee, tea, and refreshments from 11:45 am
Room 617, Wachman Building
Department of Mathematics