Spectral stability of the complex Laplacian

Siqi Fu

Rutgers University-Camden
E-mail: sfu@rutgers.edu

Abstract

In this talk, we study how the spectrum of the complex Laplacian behaves when the underlying algebraic, analytic, or geometric structure is slightly perturbed. Our focus is on stability of the variational eigenvalues of the $\bar{\partial}$-Neumann Laplacian on a bounded pseudoconvex domain $\Omega$ in $\mathbb{C}^n$ under the perturbation of $\Omega$. This talk is based in part on the joint work with Weixia Zhu.