**Spectral Stability of the Complex Laplacians**

Siqi Fu
Rutgers University - Camden

We study spectral stability of the $\bar{\partial}$-Neumann Laplacian on a bounded domain $\Omega$ in $\mathbb{C}^n$ and the Kohn Laplacian on its boundary $\partial\Omega$. It is known that spectral behavior of these complex Laplacians is intimately related to the underlying analytic and geometric structures. In this talk, we study spectral stability of these complex Laplacians when the underlying structures are perturbed. In particular, we present several results on spectral stability of the $\bar{\partial}$-Neumann Laplacian and the Kohn Laplacian when the underlying domain $\Omega$ and its boundary $\partial\Omega$ are perturbed. This talk is based on joint work with Weixia Zhu.