COMPLEX ANALYSIS SEMINAR

SPECTRAL PROPERTIES OF THE $\overline{\partial}$-NEUMANN OPERATOR

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ABSTRACT: We discuss spectral properties of the $\overline{\partial}$-Neumann operator. The spectrum of the $\overline{\partial}$-Neumann Laplacian on the Fock space is explicitly computed. It turns out that it consists of positive integer eigenvalues each of which is of infinite multiplicity. Spectral analysis of the $\overline{\partial}$-Neumann Laplacian on the Fock space is closely related to Schrödinger operators with magnetic field and to the complex Witten-Laplacian.

Date: Thursday, January 17, 2013

Time: 4pm-5pm

Place: UH 4100A

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