Quanlei Fang

Bronx Community College

Multiplier characterization for the Drury-Arveson space

Abstract

Let H_n^2 be the Drury-Arveson space on the unit ball $\mathbf{B}$ in $\mathbf{C}^n$, and suppose that $n \geq 2$. Let k_z, $z \in \mathbf{B}$, be the normalized reproducing kernel for H_n^2. In this talk we will discuss the following rather basic question in the theory of the Drury-Arveson space: For $f \in H_n^2$, does the condition $\sup_{|z|<1} \|fk_z\| < \infty$ imply that f is a multiplier of H_n^2? We show that the answer is negative and the analogue of the familiar norm inequality $\|H_\varphi\| \leq C\|\varphi\|_{\mathrm{BMO}}$ for Hankel operators fails in the Drury-Arveson space. This is joint work with Jingbo Xia.

Talk time: 07/18/2016 3:30PM— 07/18/2016 3:50PM
Talk location: Cupples I Room 113

Special Session: State space methods in operator and function theory. Organized by J. Ball and S. ter Horst.