

COMPLEX ANALYSIS SEMINAR

SOME ALGEBRAIC PROPERTIES OF TOEPLITZ OPERATORS ON THE SEGAL-BARGMANN SPACE

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ABSTRACT: Let \mathcal{H} be the Segal-Bargmann space, which consists of Gaussian square-integrable entire functions on \mathbb{C}^n . For a bounded function f on \mathbb{C}^n , T_f denotes the Toeplitz operator with symbol f acting on \mathcal{H} . Let f_1 and f_2 be two bounded radial functions, one of which is non-constant, we will discuss the necessary and sufficient conditions on a bounded function g for which $T_{f_1}T_g = T_gT_{f_2}$. We then use this result to study the commuting and zero-product problems for Toeplitz operators on \mathcal{H} . This is joint work with W. Bauer.

Date: Thursday, February 10, 2011

Time: 4pm-5pm

Place: UH 4440

Webpage: <http://math.utoledo.edu/~sonmez/complexseminar.html>