Abstract

BAUER, Wolfram (Hannover University)

"Compactness characterization of operators in the Toeplitz algebra"

During the last years the study of compactness or spectral properties for Bergman space Toeplitz operators via the boundary behavior of their Berezin transform (or even the operator symbol itself) has attracted some interest. The known results often break down if one passes from essentially bounded to classes of unbounded functions. Typically in this situation certain oscillation conditions on the operator symbols have to be posed. In this talk we treat classes of Toeplitz operators acting on weighted Bergman spaces over bounded symmetric domains or the Segal-Bargmann space under such aspects. The question whether compactness characterizations of the above type also hold for elements in closed algebras generated by Toeplitz operators is more complicated and some recent results will be discussed. This is joint work with L.A. Coburn (SUNY Buffalo) and J. Isralowitz (SUNY Albany).