İSTANBUL ANALYSIS SEMINARS

JOINT SPECTRA OF TOEPLITZ OPERATORS, GENERALIZED SCHWARZ LEMMA AND RECOVERY OF ANALYTIC FUNCTIONS

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Abstract: We will consider a problem of recovery in weighted Bergman spaces in the unit ball of $\mathbb{C}^k$ and its connection to a generalization of a classical Schwarz Lemma. We will also show that, if measures which determine recovery and/or information operators are Carleson and not compactly supported, the recovery algorithm is a limit of recovery algorithms corresponding to truncated problems with compactly supported measures. We will also express the Lagrange equation for the dual problem in terms of joint spectra of Toeplitz operators induced by information measures and use this expression for proving that the regularity condition in the dual problem is stable. Finally we will briefly touch the problem of commuting Toeplitz operators. There will be examples illustrating the results.

Date: March 25, 2013
Time: 17:30
Place: Sabancı University, Karaköy Communication Center
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