ANALYSIS SEMINAR

Truncated Toeplitz operators as a model?

by

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ABSTRACT

Truncated Toeplitz operators are a generalization of the operators associated with Toeplitz matrices and operators (discussed in detail in a recent survey paper by Sarason[3]). They are equal to the composition of a multiplication operator with projection on a *model space*- i.e. the orthogonal complement of a shift invariant subspace of the Hardy space. I will be talking about questions and answers concerning similarity and unitary equivalence to these operators ([1], [2], [4]).

Bibliography:

1. Cima, J., Garcia, S. Ross, W. and Wogen, W. Truncated Toeplitz operators: spatial isomorphism, unitary equivalence, and similarity. Indiana Univ. Math. J. 59(2):595-620, 2010.

2. Garcia, S., Poore D., Ross, W., Unitary equivalence to a truncated Toeplitz operator: analytic symbols, Proc. Amer. Math. Soc. 140(2012), 1281-1295.

3. Sarason, D. Algebraic properties of truncated Toeplitz operators. Oper. Matrices 1 (2007), 491-526.

4. E. Strouse, D. Timotin, M Zarrabi Unitary equivalence to truncated Toeplitz operators, Indiana Journal, to appear.

Monday, March 5, 2012 at 3:00-4:00 pm

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