WABASH
EXTRAMURAL MODERN ANALYSIS
SEMINAR

February 25

2:00 p.m.
at
Wabash College
in rooms 114 and 118 Baxter Hall

Times given are Eastern Daylight Time,
which is currently local time for Central Indiana and Ohio.

2:00–2:30 Refreshments and conversation
2:30–3:30 Multiplication Operators on the Bergman Space, Riemann Surfaces and Analytic Continuation
DECHAO ZHENG, Chongqing University and Vanderbilt University
3:30–4:00 More refreshments and conversation
4:00–5:00 Truncated Toeplitz operators
DAN TIMOTIN, IMAR Bucharest and Indiana University
5:00–... Refreshments and farewells

The purpose of Wabash Seminar talks is to present surveys of interest to all analysts, including graduate students and scholars working in areas far from the speaker’s specialty. Come and meet your fellow analysts, learn what’s going on, and spread the word.

Next Meeting: March 31

For further information call
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Multiplication Operators on the Bergman Space, Riemann Surfaces and Analytic Continuation

DECHAO ZHENG

In this talk, I will present a joint work with R. Douglas and S. Sun on multiplication operators on the Bergman space. Using the group-like property of local inverses of a finite Blaschke product $\phi$, we will show that the von Neumann algebra, the intersection of the commutants of the multiplication operator $M_\phi$ by $\phi$ on the Bergman space and its adjoint is finite dimensional, which dimension equals the number of connected components of the Riemann surface of $\phi^{-1} \circ \phi$ over the unit disk.

Truncated Toeplitz operators

DAN TIMOTIN

Truncated Toeplitz operators, introduced in full generality by Sarason a few years ago, are compressions of multiplication operators on $H^2$ to subspaces invariant to the adjoint of the shift. The talk will survey this newly developing area, presenting several of the basic results and highlighting some intriguing open questions.