WABASH
EXTRAMURAL MODERN ANALYSIS
SEMINAR

April 11

2:00 p.m.

at

Wabash College

in rooms 114 and 118 Baxter Hall

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

2:00–2:30	*Refreshments and conversation*
2:30–3:30	**Rigidity Aspects in the Von Neumann Algebras Associated with Surface Braid Groups** *IONUT CHIFAN, University of Iowa*
3:30–4:00	*More refreshments and conversation*
4:00–5:00	**Symmetries of Noncommutative Brownian Motions** *STEVE AVSEC, Texas A&M 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: Miniconference IUPUI September 12-13, 2015

For further information call

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Rigidity Aspects in the Von Neumann Algebras Associated with Surface Braid Groups

IONUT CHIFAN

In this talk I will present several recent results regarding the classification of the von Neumann algebras arising from actions of surface braid groups on probability spaces. For instance, we will show such algebras completely remember the initial group/action data. In addition, we show these algebras are *prime*, i.e., they cannot be decomposed as tensor products of diffuse von Neumann algebras. If time permits I will also discuss a few open problems in this area. This is based on several joint works with A. Ioana, Y. Kida, and S. Pant.

Symmetries of Noncommutative Brownian Motions

STEVE AVSEC

Classically, Freedman's theorem characterizes classical (conditional) Brownian motion as the only stochastic process with rotatable increments. Random variables are rotatable if their joint moments are invariant under the action of the orthogonal group. In this talk, we will discuss noncommutative processes with rotatable and quantum rotatable increments. This will include some joint work with Marius Junge.