WABASH
EXTRAMURAL MODERN ANALYSIS
SEMINAR

February 27

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	**On relative property (T) and Haagerup's property** *IONUT CHIFAN, Vanderbilt University*
3:30–4:00	*More refreshments and conversation*
4:00–5:00	**Stochastic integration in noncommutative symmetric spaces** *SJOERD DIRKSEN, Delft University of Technology, the Netherlands*
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: April 10

For further information call

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On relative property (T) and Haagerup's property

IONUT CHIFAN

For a given countable group Γ we consider the following three properties:

1. Γ has an infinite subgroup with relative property (T).
2. The group von Neumann algebra $L(\Gamma)$ has a diffuse von Neumann subalgebra with relative property (T).
3. Γ does not have Haagerup's property.

It is clear that (1)⇒(2)⇒(3). We prove that both of the converses are false. This is joint work with Adrian Ioana.

Stochastic integration in noncommutative symmetric spaces

SJOERD DIRKSEN

After reviewing stochastic integration with respect to classical Brownian motion, I will present a simple approach to defining stochastic integrals with respect to Boson, free and Fermion Brownian motion in (certain) noncommutative symmetric spaces associated with a finite von Neumann algebra. The main ingredients in the construction are decoupling and noncommutative Khintchine inequalities. This is (partly) joint work with D. Potapov and F. Sukochev (University of New South Wales).