

Workshop II: Approximation Properties in Operator Algebras and Ergodic Theory

Monday April 30, 2018

- 8:30–9:20 *Check-In/Breakfast (Hosted by IPAM)*
- 9:20–9:30 *Welcome and Opening Remarks*
- 9:30–10:20 **Narutaka Ozawa** (Kyoto University)
Aut(F_5) has the property (T)
- 10:30–10:50 *Break*
- 10:50–11:40 **Jesse Peterson** (Vanderbilt University)
Connes' character rigidity conjecture for lattices in higher rank groups
- 11:50–12:10 *Break*
- 12:10–1:00 **Remi Boutonnet** (Institut de Mathematiques de Bordeaux)
A notion of spectral gap for infinite measure preserving actions
- 1:15–2:45 *Lunch (on your own)*
- 2:45–3:35 **Tim Austin** (University of California, Los Angeles (UCLA))
Entropy and the structure of measure-preserving transformations
- 3:45–4:05 *Break*
- 4:05–4:55 **Gilles Pisier** (Texas A&M University - College Station)
Completely Sidon sets in discrete groups and C^ -algebras*

Tuesday May 1, 2018

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:20 **Lewis Bowen** (University of Texas at Austin)
Sofic homology invariants and the Weak Pinsker property
- 10:30–10:50 *Break*
- 10:50–11:40 **Adrian Ioana** (University of California, San Diego (UCSD))
Rigidity for von Neumann algebras of amalgamated free product groups
- 11:50–12:10 *Break*

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- 12:10–1:00 **Sorin Popa** (University of California, Los Angeles (UCLA))
On the vanishing cohomology problem for cocycle actions of groups on II_1 factors
- 1:15–2:45 *Lunch (on your own)*
- 2:45–3:35 **Ben Hayes** (University of Virginia)
Mixing and spectral gap relative to Pinsker algebras of Sofic groups
- 3:45–4:00 *Break*
- 4:30–5:30 **Vaughan Jones** (Vanderbilt University)
Public Lecture - Green Family Lecture Series: "What is it about the Plane?"
- 5:30–6:45 *Reception (Location: IPAM Lobby)*

Wednesday May 2, 2018

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:20 **Assaf Naor** (Princeton University)
Impossibility of metric dimension reduction in Schatten 1
- 10:30–10:50 *Break*
- 10:50–11:40 **Wouter Van Limbeek** (University of Michigan)
Rigidity of warped cones and coarse geometry of expanders
- 11:50–12:10 *Break*
- 12:10–1:00 **Thomas Vidick** (California Institute of Technology)
Unitary correlation sets
- 1:15–2:45 *Lunch (on your own)*
- 2:45–3:35 **Gideon Schechtman** (Weizmann Institute of Science)
Obstructions to embedding subsets of Schatten classes in L_p spaces
- 3:45–4:00 *Break*
- 4:30–5:30 **Vaughan Jones** (Vanderbilt University)
Green Family Lecture Series: "God May or May Not Play Dice but He Sure Loves a von Neumann Algebra"
- 5:30–6:45 *Reception (Location: IPAM Lobby)*

Thursday May 3, 2018

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:20 **Vaughan Jones** (Vanderbilt University)
The Wysiyg representations of the Thompson groups
- 10:30–10:50 *Break*
- 10:50–11:40 **Emmanuel Breuillard** (Westfälische Wilhelms Universität Münster)
Joint spectral radius and joint spectrum
- 11:50–12:10 *Break*
- 12:10–1:00 **Marius Junge** (University of Illinois at Urbana-Champaign)
Ubiquitous Connes' embedding problem
- 1:15–2:45 *Lunch (on your own)*
- 2:45–3:35 **David Kerr** (Texas A&M University - College Station)
Almost finiteness, Z -stability, and the small boundary property
- 3:45–4:05 *Break*
- 4:05–4:55 **Alain Valette** (Université de Neuchâtel)
Combinatorial hyperfiniteness for graph sequences

Friday May 4, 2018

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:20 **Miklos Abert** (Renyi Institute of Mathematics)
A measured approach to sofic entropy
- 10:30–10:50 *Break*
- 10:50–11:40 **Stefaan Vaes** (KU Leuven)
Bernoulli actions of type III and L^2 -cohomology
- 11:50–12:10 *Break*
- 12:10–1:00 **Cyril Houdayer** (Université Paris-Sud (Orsay))
Structure of bicentralizer algebras and inclusions of type III factors
- 1:15–2:45 *Lunch (on your own)*
- 2:45–3:35 **Ionut Chifan** (University of Iowa)
Some rigidity results for II_1 factors arising from wreath products of property (T) groups
- 3:45–4:05 *Break*

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4:05–4:55 **Thomas Sinclair** (Purdue University)
On the classification of group von Neumann algebras

Saturday May 5, 2018

8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*

9:30–10:20 **Ilijas Farah** (York University)
Rigidity for uniform Roe algebras

10:30–10:50 *Break*

10:50–11:40 **Isaac Goldbring** (University of California, Irvine (UCI))
Spectral gap and definability

11:50–12:10 *Break*

12:10–1:00 **William Slofstra** (University of Waterloo)
A group with subexponential hyperlinear profile

1:15–2:45 *Lunch (on your own)*

2:45–3:35 **Hanfeng Li** (SUNY Buffalo)
Garden of Eden and specification

3:45–4:05 *Break*

4:05–4:55 **Masaki Izumi** (Kyoto University)
The flow of weights and the Cuntz-Pimsner algebras.

5:10 *Conclusion*

