

# Measurability, Ergodic Theory and Combinatorics

8-12 July 2019

Organisers: Miklós Abért, Tim Austin, András Máthé and Oleg Pikhurko

## PROGRAMME

All lectures will be in Room MS.01, Mathematics Institute

### Monday 8 July

- 10:00 Registration (Room B1.37) and coffee in the Mathematics Institute Staff Common Room  
11:00 **Joel Moreira** (Northwestern University) *A sunset conjecture of Erdős*  
12:00 **Ben Green** (University of Oxford) *Monochromatic sums and products*  
13:00 Lunch in the Mathematics Institute Staff Common Room  
14:30 **Andreas Thom** (TU Dresden) *Obstructions to stability*  
15:30 Coffee break in the Mathematics Institute Staff Common Room  
16:00 **Vitaly Bergelson** (Ohio State University) *Polynomial Ramsey Theory*  
17:00 Open problem session  
18:00 Reception and dinner in the Mathematics Institute Staff Common Room

### Tuesday 9 July

- 9:30 **Clinton Conley** (Carnegie Mellon University) *Equitable colorings*  
10:30 Coffee break in the Mathematics Institute Staff Common Room  
11:00 **Andrew Marks** (UCLA) *Measurable realizations of abstract systems of congruences*  
12:00 **Robin Tucker-Drob** (Texas A&M University) *TBD*  
13:00 Lunch in the Mathematics Institute Staff Common Room  
14:30 **Anush Tserunyan** (University of Illinois at Urbana-Champaign) *TBD*  
15:30 Coffee break in the Mathematics Institute Staff Common Room  
16:00 **Damien Gaboriau** (ENS Lyon) *On IRS of surface groups and higher dimensional manifolds*  
17:00 **Łukasz Grabowski** (Lancaster University) *Almost finite actions of non-amenable groups*  
18:00 Dinner in the Mathematics Institute Staff Common Room

*Continued over*

## PROGRAMME cont.

All lectures will be in Room MS.01, Mathematics Institute

### Wednesday 10 July

- 9:30 **Nikolay Nikolov** (University of Oxford) *Gradients in discrete and profinite groups*
- 10:30 Coffee break in the Mathematics Institute Staff Common Room
- 11:00 **Tamar Ziegler** (Hebrew University) *Sections of high rank varieties and application*
- 12:00 Lunch & free afternoon (discussions, group work, hiking trip, etc)
- 19:00 Workshop dinner (Radcliffe)

### Thursday 11 July

- 9:30 **Gábor Elek** (Lancaster University) *Continuous graph limits and the spaces of Cantor actions*
- 10:30 Coffee break in the Mathematics Institute Staff Common Room
- 11:00 **Gábor Kun** (Alfréd Rényi Institute) *Nonamenable groups that do not admit a sofic approximation by expanders*
- 12:00 **Ágnes Backhausz** (Eötvös Loránd University) *Action convergence of operators and graphs*
- 13:00 Lunch in the Mathematics Institute Staff Common Room
- 14:30 **Tom Sanders** (University of Oxford) *Bootstrapping partition regularity of linear systems*
- 15:30 Coffee break in the Mathematics Institute Staff Common Room
- 16:00 **Tianyi Zheng** (UCSD) *The double commutator lemma for IRSs*
- 17:00 **Endre Csóka** (Alfréd Rényi Institute) *Phase transitions in the independent sets of random graphs*
- 18:00 Dinner in the Mathematics Institute Staff Common Room

### Friday 12 July

- 9:30 **Brandon Seward** (Courant Institute) *Borel asymptotic dimension and hyperfinite equivalence relations*
- 10:30 Coffee break in the Mathematics Institute Staff Common Room
- 11:00 **Lewis Bowen** (University of Texas at Austin) *A topological dynamical system with two different positive sofic entropies*
- 12:00 **Hanfeng Li** (SUNY at Buffalo) *Entropy and combinatorial independence*
- 13:00 Lunch in the Mathematics Institute Staff Common Room & free time