

**Workshop on “Dynamics and Combinatorics”****November 14 - 18, 2011****Organized by M. Einsiedler, P. Grabner, C. Krattenthaler,  
and T. Ziegler****• Monday, November 14, 2011****10:00 – 11:00: Vitaly Bergelson***Ultrafilters and ergodic Ramsey theory***11:00 – 11:30: coffee break****11:30 – 12:30: Christian Mauduit***Finite automata, prime and square numbers***12:30 – 14:30: lunch break****14:30 – 15:30: Anatoly Vershik***Totally non free (TNF) actions of the groups and representations of type  $II_1$* **15:30 – 16:00: break****16:00 – 17:00: Joël Rivat***Gelfond conjecture on prime numbers***17:30 Reception: ESI Common Room****• Tuesday, November 15, 2011****9:30 – 10:30: Anish Ghosh***Diophantine approximation on homogeneous varieties***10:30 – 11:00: coffee break****11:00 – 12:00: Christopher Deninger***Generalized Nevanlinna theory and invariant measures on the circle***12:00 – 14:30: lunch break****14:30 – 15:30: Anke Pohl***Period functions for Maass cusp forms via symbolic dynamics***15:30 – 16:00: break****16:00 – 17:00: Philippe Michel***A new applications of Linnik's ergodic method***• Wednesday, November 16, 2011****09:00 – 10:00: Christian Mauduit***Gelfond conjecture on polynomial numbers***10:00 – 10:20: coffee break****10:20 – 11:20: Michael Björklund***Product set theorems in countable amenable groups***11:40 – 12:40: Miguel Walsh***Norm convergence of nilpotent ergodic averages***Free Afternoon**

- **Thursday, November 17, 2011**

**09:30 – 10:30: Jeff Lagarias**

*The maximal density of product-free sets in  $\mathbb{Z}/n\mathbb{Z}$*

**10:30 – 11:00:** coffee break

**11:00 – 12:00: Nikos Frantzikinakis**

*A multidimensional Szemerédi theorem for Hardy sequences of different growth*

**12:00 – 14:30:** lunch break

**14:30 – 15:30: Imre Ruzsa**

*Rotating stripes*

**15:30 – 16:00:** break

**16:00 – 17:00: Alexander Bufetov**

*Limit theorems for horocycle flows*

**19:30 Heurigenabend (Conference Dinner):** Heuriger Feuerwehr-Wagner, Grinzingenstrasse 53, 1190 Wien

- **Friday, November 18, 2011**

**09:30 – 10:30: Benjamin Weiss**

*On the isomorphism problem in ergodic theory*

**10:30 – 10:50:** coffee break

**10:50 – 11:50: Alexander Fish**

*Ergodic Plunnecke inequalities with applications in additive number theory*

**12:10 – 13:10: Klaus Schmidt**

*Entropy and growth rates of periodic points for algebraic  $\mathbb{Z}^d$ -actions*

**All lectures take place in the ESI Boltzmann Lecture Hall**