

Workshop on  
INFINITE MONSTER GROUPS

December 14<sup>th</sup> -18<sup>th</sup> 2011  
Erwin-Schrödinger-Institute

Organizers: Goulmara Arzhantseva | Mark Sapir

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TUESDAY, December 13: Erwin Schrödinger Lecture

17:00-18:00 Martin BRIDSON *Finitely presented groups: geometry, decision problems, finite quotients, and monsters*

18:00 RECEPTION (IN THE SPIRIT OF ADVENT)

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WEDNESDAY, December 14

09:00-10:00 Martin BRIDSON *Decision problems for discrete and profinite groups*

COFFEE BREAK

10:20-11:20 Denis OSIN *Introductory talk: Asymptotic cones of finitely generated groups*

11:30-12:30 Yves CORNULIER *Monster polycyclic groups?*

LUNCH BREAK

15:00-16:00 Rémi COULON *Growth and order of automorphisms of free groups and free Burnside groups.*

16:15-17:15 Thomas DELZANT *Kähler groups, real hyperbolic spaces and the Cremona group*

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THURSDAY, December 15

09:00-10:00 Alexey MURANOV *Boundedly generated groups and small-cancellation method.*

COFFEE BREAK

10:20-11:20 Arye JUHASZ *The Combinatorics of Engel Words*

LUNCH BREAK

13:30-14:30 Andreas THOM *Introductory talk: von Neumann algebras and  $l_2$ -invariants*

14:45-15:45 Viktor SCHROEDER *Moebius structure on the boundary of hyperbolic groups*

16:00-17:00 Miklos ABERT *On Invariant Random Subgroups and Benjamini-Schramm convergence*

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## FRIDAY, December 16

09:00-10:00 Olga KHARLAMPOVICH *Definable subsets in a free group (joint with A. Myasnikov)*

COFFEE BREAK

10:20-11:20 Alexei MIASNIKOV *Dehn Monsters*

11:30-12:30 Andreas THOM *Determinants, Entropy and  $l_2$ -Torsion*

FREE AFTERNOON

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## SATURDAY, December 17

09:00-10:00 Ashot MINASYAN *Residual finiteness of outer automorphism groups*

COFFEE BREAK

10:20-11:20 Alexander OLSHANSKII *Some monster actions of free and hyperbolic groups*

11:30-12:30 Jan SPAKULA *Coarse amenability and coarse embeddings*

LUNCH BREAK

14:30-15:30 Shahar MOZES *A locally compact simple group with no lattices*

15:45-16:45 Ralph STREBEL *Sigma-invariants and their applications*

17:00-18:00 PROBLEM SESSION

19:30 CONFERENCE DINNER WEINGUT FEUERWEHR WAGNER, Grinzinger Straße 53

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## SUNDAY, 18

09:00-10:00 Valerio CAPRARO *A construction of groups preserving hyperlinearity.*

COFFEE BREAK

10:20-11:20 Bertrand RÉMY *Simple and non-simple groups acting on buildings, overview and open questions*

11:30-12:30 Denis OSIN *Groups with hyperbolically embedded subgroups*

LUNCH BREAK

14:30-15:30 Jacek SWIATKOWSKI *A degree of topological complexity for Gromov boundaries of hyperbolic groups.*

15:45-16:45 Pavel ZALESSKII *Profinite Topology, Goodness and mod- $p$  Schur multiplier*

17:00-18:00 Jesse D PETERSON  *$W^*$ -Superrigidity*



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