

« Random Walks and Asymptotic Geometry of Groups » January 6th – April 4th, 2014

Conference

« Asymptotic properties of groups »

Paris March 24th, 2014 – **Amphithéâtre Friedel** – **ENSCP** (same Campus as IHP) Paris March 25th – 28th, 2014 – **Amphithéâtre Hermite & Darboux** – **IHP**

ORGANIZERS

Emmanuel Breuillard (University of Paris-Sud, France) Indira Chatterji (University of Orléans, France) Anna Erschler (University of Paris-Sud, France)

SPEAKERS

Miklos Abert (Renyi Institute, Budapest, Hungary)
Laurent Bartholdi (Göttingen, Germany)
Yves Benoist (Orsay, France)
Mladen Bestvina (University of Utah, USA)
Martin Bridson (Oxford, UK)
Thomas Delzant (Strasbourg, France)
Joel Friedman (University of British Columbia, Canada)
Rostislav Grigorchuk (Texas A&M, USA)
Gilbert Levitt (Caen, France)
Elon Lindenstrauss (Hebrew University, Jerusalem, Israel)
Alex Lubotzky (Hebrew University, Jerusalem, Israel)

Nicolas Monod (EPFL, Lausanne, Switzerland)
Amos Nevo (Technion, Israel)
Nikolai Nikolov (Oxford, UK)
Alexander Olshanskiy (Vanderbilt University, USA)
Leonid Potyagailo (Lille, France)
Eliyahu Rips (Hebrew University, Jerusalem, Israel)
Mark Sapir (Vanderbilt University, USA)
Zlil Sela (Hebrew University, Jerusalem, Israel)
Karen Vogtmann (Cornell University, USA)
John Wilson (Oxford, UK)





PROGRAM

Monday March 24 th					
Amphithéâtre Friedel – ENSCP (same Campus as IHP)					
09.45 am - 10.15 am 10.15 am - 11.00 am 11.15 am - 12.00 pm 12.00 pm - 02.00 pm	Registration and welcome Rostislav Grigorchuk Martin Bridson Lunch break	Coffee on Ground floor of IHP Invariant random subgroups of groups of the lamplighter type and some geometric groups. Profinite isomorphism problems.			
02.00 pm – 02.45 pm 03.00 pm – 03.45 pm 03.45 pm – 04.15 pm 04.15 pm – 05.00 pm	Eliyahu Rips Yves Benoist Coffee break Nikolai Nikolov	Free Engel Groups and Similar Groups. Random walk on p-adic flag varieties. Ground floor of IHP Right angled cocompact lattices in higher rank simple Lie groups.			
Tuesday March 25 th					
Amphithéâtre Hermite & Darboux – IHP					
10.00 am – 10.45 am 10.45 am – 11.15 am 11.15 am – 12.00 pm	Elon Lindenstrauss Coffee break Thomas Delzant	Spectral gap, random walks on Euclidean isometry groups, and self-similar measures. Ground floor of IHP. Holomorphic families of Riemann surfaces from the point of view of asymptotic group theory.			
$12.00 \ pm - 02.00 \ pm$	Lunch break				
03.00 pm – 03.45 pm 03.45 pm – 04.15 pm	Coffee break	Relative growth of subgroups in finitely generated groups. Ground floor of IHP			
04.15 pm - 05.00 pm	Laurent Bartholdi	Imbeddings in groups of subexponential growth.			
Wednesday March 26 th					
Amphithéâtre Hermite & Darboux – IHP					
10.00 am – 10.45 am	Alex Lubotzky	Quantum error correcting codes and asymptotic properties of 4-dimensional arithmetic hyperbolic manifolds.			
10.45 am − 11.15 am	33	Ground floor of IHP			
11.15 am – 12.00 pm		Sheaves on Graphs, L^2 Betti Numbers, and Applications.			
12.15 pm – 01.00 pm	Nicolas Monod	Cutting and pasting: a group for Frankenstein.			
FREE AFTERNOON					

Thursday March 27th

Amphithéâtre Hermite & Darboux – IHP

10.00 am – 10.45 am 10.45 am – 11.15 am 11.15 am – 12.00 pm	Coffee break	On best possible rates of Diophantine approximation by lattice orbits. <i>Ground floor of IHP</i> Envelopes and equivalence relations in a free group.
$12.30 \ pm - 02.00 \ pm$	Lunch break	
02.00 pm - 02.45 pm 03.00 pm - 03.45 pm 03.45 pm - 04.15 pm	John Wilson Coffee break	On the asymptotic dimension of a curve complex. Metric ultraproducts of finite simple groups. Ground floor of IHP
0.4.15 nm = 0.5.00 nm	Mark Canin	The Taraki numbers of groups

04.15 pm – 05.00 pm **Mark Sapir** The Tarski numbers of groups.

06.30 pm Cocktail Dinner Party Jussieu – Pierre and Marie Curie University (UPMC)

(participants who registered for this cocktail will receive the instructions per e-mail)

Note: bring your ID card or passport

Friday March 28th

Amphithéâtre Hermite & Darboux - IHP

10.00 am – 10.45 am 10.45 am – 11.15 am 11.15 am – 12.00 pm	Coffee break	Invariant random subgroups. Ground floor of IHP Similar Relatively hyperbolic actions of a group.
$12.00 \ pm - 02.00 \ pm$	Lunch break	
02.00 pm - 02.45 pm 03.00 pm - 03.45 pm 03.45 pm - 04.15 pm		Vertex finiteness for relatively hyperbolic groups. Outer space for right-angled Artin groups. CONFERENCE