

CURRICULUM VITAE**SEONHEE LIM**

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Education

Ph.D. Yale University and Université Paris-Sud, May and June 2006.

Thesis Advisor: G. Margulis and Frédéric Paulin.

Thesis title: Enumeration and entropy rigidity of lattices in automorphism groups of trees and buildings.

M.S. Yale University, May 2001.

B.S. Seoul National University, graduation with honors (Summa cum laude), February 1999.

Research field : Dynamics and ergodic theory of group actions on trees and buildings, metric spaces of negative curvature, discrete subgroups of Lie groups, rigidity.

Papers

1. Counting overlattices in automorphism groups of trees, *Geom. Dedicata*, Vol 118, no. 1 (2006), pp. 1-21.
2. Minimal volume entropy on graphs, *Trans. Amer. Math. Soc.* 360 (2008), 5089-5100.
3. Covering theory for complexes of groups (with A. Thomas), *J. Pure Appl. Algebra* 212 (2008) 1632-1663.
4. Counting overlattices for polyhedral complexes (with A. Thomas), submitted for publication. (<http://www.math.cornell.edu/~slim>)
5. A proof of a $L^{1/2}$ ergodic theorem (with François Ledrappier), submitted for publication. (<http://www.math.cornell.edu/~slim>)

Talks

Analysis and Geometry on Groups Seminar, University Paris 7, Paris, France (July 23, 2008)

Geometry Seminar, ETH, Zurich, Switzerland (July 9, 2008)

Minicourse on Graphs of Groups and Complexes of Groups, Neuchatel, Switzerland (4 lectures, June 2, 9, 16, 23, 2008)

Geometry and Dynamics Seminar, Ecole Normale Supérieure de Lyon, France (June 18, 2008)

- Conference on Analysis, Geometry and Dynamics on Groups, Neuchatel, Switzerland (June 13, 2008)
- Conference on Discrete Groups and Geometric Structures with Applications, Kortrijk, Belgium (May 29, 2008)
- Dynamics Seminar, Northwestern University (May 13, 2008)
- AMS Spring Eastern Sectional Meeting, Special Session on Geometric Topology, Courant Institute (Mar. 15-16, 2008)
- Topology and Geometric Group Theory Seminar, Cornell University (Feb. 26, 2008)
- Geometry and Topology Seminar, SUNY Buffalo (Feb. 22, 2008)
- Geometry and Topology Seminar, Binghamton University (Feb. 21, 2008)
- Geometric Group Theory Seminar for Postdocs, MSRI (Oct. 3, 2007).
- Geometry Seminar, University of Notre Dame (Sept. 27, 2007)
- Algebra summer workshop, Seoul National University (August, 2007)
- Number Theory Seminar, Korea Institute of Advanced Studies (August, 2007)
- Geometry Seminar, Korea Institute of Advanced Studies (July, 2007)
- Ergodic Theory Seminar, Ohio State University (May 10, 2007).
- Topology and Geometric Group Theory Seminar, Cornell University (March 13, 2007).
- Graduate Student Seminar, Yale University (May 19, 2006).
- Geometry Seminar, University of Notre Dame (May 11, 2006).
- Topology and Geometric Group Theory Seminar, Cornell University (December 6, 2005).
- Geometric Group Theory Seminar, Ohio State University (November 30, 2005).
- Seminar on Group Actions: Dynamics, Geometry, Invariants, Yale University (November 8, 2005).
- Conference on Geometric and Probabilistic Methods in Group Theory and Dynamical Systems, Texas A&M (November 4, 2005).
- AMS Special Session on Geometric group theory, Bard College (October, 2005).
- Topology and Geometry seminar, University of Chicago (August 2005).
- International Conference “Asymptotic and Probabilistic Methods in Geometric Group Theory”, University of Geneva, Switzerland, June 2005.
- Group Actions: Dynamics, Geometry, Invariants Seminar, Yale University (December 2004).
- Lie Group Seminar, Caltech (November 2004).
- International Conference on Group Theory: combinatorial, geometric and dynamical aspects of infinite groups, Gaeta, Italy (June 2003).

Séminaire Geometrie-Topologie-Dynamique, Université Paris-Sud, France (February 2003).

Students seminar on “Groupes hyperboliques d’après Gromov”, Yale University (December 2001).

Students seminar on “Dynamical systems”, Yale University (3 talks, Mars 2001).

Upcoming Conferences Organized

AIM Workshop: Volume Entropy Rigidity, Zurich (June 2009).

AMS Western Section Meeting, Special Session on Recent Progress in Geometric Group Theory, San Francisco (April 2009) (Session associated to the invited address of K. Vogtmann).

Awards and Honors

[2002-2005] Fellowship, Université Paris-Sud, France.

[1999-2006] Fellowship, Yale University.

[1996] 3rd prize, National Math Competition for University students, Korea.

[1995-1999] KFAS (Korea Foundation for Advanced Studies) Scholarship

Teaching

[Spring 2008] Instructor, Multivariable Calculus, Cornell University.

[Spring 2007] Instructor, Linear algebra and differential equations, Univ. of Notre Dame.

[Spring 2007] Instructor, Elements of calculus II, Univ. of Notre Dame.

[Fall 2006] Instructor, Calculus of one variable II, Univ. of Notre Dame.

[Fall 2006] Instructor, Elements of calculus I, Univ. of Notre Dame.

[Fall 2005] Instructor, Calculus of one variable II (Math 115), Yale University.

[Fall 2004] Instructor, Multivariable calculus (Math 120), Yale University.

[Fall 2003] Instructor, Calculus of one variable II (Math 115), Yale University.

[Spring 2002] Instructor, Multivariable calculus (Math 120), Yale University.

[Spring 2000, Fall 2001] Math and science tutor, Morse College, Yale University.

[1999-2001] Mathematics tutor, Yale Univ.

References

Gregory Margulis, Yale University, *margulis@math.yale.edu*.

Hillel Furstenberg, Hebrew University, *harry@math.huji.ac.il*.

Francois Ledrappier, University of Notre Dame, *ledrappier.1@nd.edu*.

Michael Frame (teaching), Yale University, *michael.frame@yale.edu*.