

Curriculum Vitae of Anne Thomas

Mathematical Institute
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Education

- Ph.D. in Mathematics, University of Chicago, June 2007 (Advisor: Benson Farb)
- M.S. in Mathematics, University of Chicago, June 2004
- B.Sc.(Hons) in Pure Mathematics, University of New South Wales, July 2002
- B.A. in History, University of New South Wales, July 2002

Employment

- University of Oxford, Postdoctoral Researcher, from September 2009
- Cornell University, H. C. Wang Assistant Professor, January 2008 to June 2009
- Mathematical Sciences Research Institute, Postdoctoral Fellow, August to December 2007

Grants, Prizes and Fellowships

- National Science Foundation Grant #DMS-0805206, 2008–2011
- American Institute of Mathematics Squares Program Award, 2009
- London Mathematical Society Scheme 2 Travel Grant, 2008
- Postdoctoral Fellowship, French National Research Agency (ANR), 2008
- Lawrence and Josephine Graves Teaching Prize, University of Chicago, 2006
- Doolittle–Harrison Travel Fellowship, University of Chicago, 2005
- University Medal in Pure Mathematics, University of New South Wales, 2002

Research Interests

Geometric group theory, rigidity, lattices, buildings

Papers and Preprints

- *Cocompact lattices of minimal covolume in rank 2 Kac–Moody groups, Part I: Edge-transitive lattices*
with Inna (Korchagina) Capdeboscq, submitted, [arXiv:0907.1350](https://arxiv.org/abs/0907.1350).
- *Density of commensurators for uniform lattices of right-angled buildings*
with Angela Kubena Barnhill, submitted, [arXiv:0812.2280](https://arxiv.org/abs/0812.2280).
- *Existence, covolumes and infinite generation of lattices for Davis complexes*
submitted, [arXiv:0807.3312](https://arxiv.org/abs/0807.3312).

- *Counting overlattices for polyhedral complexes*
with Seonhee Lim, submitted.
- *Covering theory for complexes of groups*
with Seonhee Lim, J. Pure Appl. Algebra 212 (2008), 1632–1663.
- *On the set of covolumes of lattices for Fuchsian buildings*
C. R. Acad. Sci. Paris, Sér. I 344 (2007), 215–218.
- *Covolumes of uniform lattices acting on polyhedral complexes*
Bull. London Math. Soc. 39 (2007), 103–111.
- *Lattices acting on right-angled buildings*
Algebr. Geom. Topol. 6 (2006), 1215–1238.

Refereed Conference Proceedings

Problems on automorphism groups of nonpositively curved polyhedral complexes and their lattices
with Benson Farb and Chris Hruska, to appear in Festschrift for Robert Zimmer, [arXiv:0803.2484](https://arxiv.org/abs/0803.2484).

Seminar Talks

- 2009 University of Sydney, The Ohio State University, University of Chicago
- 2008 University of Bristol, University of Warwick, University of Oxford, University of Newcastle (UK), University of Glasgow, State University of New York at Binghamton, State University of New York at Buffalo, University of Chicago
- 2007 University of California at Davis, Northwestern University, University of Illinois at Urbana-Champaign, Columbia University, University of Notre Dame, Cornell University, Yale University
- 2006 University of Michigan, University of Oklahoma, University of Sydney, The Ohio State University
- 2005 Yale University, Université de Bourgogne, Université des Sciences et Technologies de Lille, Université Paris-Sud 11

Invited Conference Talks

- New Directions in Geometric Group Theory, Brisbane, Australia, December 2009
- Geometric Group Theory: Davis 60, Bedlewo, Poland, June 2009 (could not attend)
- Journées ANR de théorie géométrique des groupes, Strasbourg, France, June 2009 (could not attend)
- John Meakin 60th Birthday Conference, Lincoln NE, May 2009
- Special Session on Geometric Group Theory and Geometric Topology, Spring Topology and Dynamics Conference, Gainesville FL, March 2009
- AMS Special Session on Geometric Group Theory, Baton Rouge LA, March 2008
- Special Session on Geometric Group Theory, Spring Topology and Dynamics Conference, Milwaukee WI, March 2008
- MSRI workshop “Topics in Geometric Group Theory”, November 2007

- Wasatch Topology Conference, Salt Lake City UT, August 2007
- AMS Special Session on Geometric Topology, Oxford OH, March 2007
- AMS Special Session on Geometric Group Theory, New Orleans LA, January 2007
- Special semester on “Analysis and group actions on trees and buildings”, Rutgers State University at New Brunswick, March 2006

Contributed Conference Talks

- Kortrijk Workshop on Discrete Groups and Geometric Structures, May 2008 (could not attend)
- Oberwolfach workshop “Buildings: Interactions with Algebra and Geometry”, January 2008
- Geometric and Probabilistic Methods in Group Theory, College Station TX, November 2005
- Asymptotic and Probabilistic Methods in Group Theory, Geneva, June 2005
- Kortrijk Workshop on Discrete Groups and Geometric Structures, Oostende, June 2005
- Program for Women in Mathematics: The Geometry of Groups, Institute for Advanced Study, May 2005

Conferences

- Banff workshop “Quasi-isometric rigidity in low dimensional topology”, March 2010 (invited participant)
- Hausdorff Research Institute for Mathematics, Conference for Trimester Program on Rigidity, November 2009
- Robert Zimmer 60th Birthday Conference, Chicago IL, September 2007 (invited participant)
- MSRI workshop “Introduction to Geometric Group Theory”, August 2007
- MSRI workshop “Connections for Women: Geometric Group Theory”, August 2007
- AIM workshop “Problems in Geometric Group Theory”, April 2007 (invited participant)
- Oberwolfach workshop “Topological and Geometric Methods in Group Theory”, April 2006 (invited participant)
- Workshop on Group Actions and Rigidity, Honolulu HI, March 2006 (invited participant)

Teaching Experience

- Instructor, Cornell University
Prove It!, Spring 2009
Groups and Geometry, Spring 2009
Calculus, Fall 2008
Seminar: Polyhedral Complexes in Topology and Geometric Group Theory, Spring 2008
- Lecturer in the College (sole instructor), University of Chicago
Honors Calculus, 2006–2007
Calculus, 2005–2006
Mathematical Methods for Social Sciences, 2004–2005
- Mentor for undergraduate independent study, University of Chicago, 2005–2006
Projects on Knot Theory, Fuchsian Groups, Non-Euclidean Geometry

- College Fellow (teaching assistant), University of Chicago, 2003–2004
Honors Algebra
- Various: tutor, Maple assistant, remedial tutor, University of New South Wales, 2000–2002
Linear Algebra, Calculus, Computer Science
- Tutor, Australian National Mathematics Summer School, January 2002

Expository Talks

- Hypatia Seminar, University of California at Santa Barbara, February 2009 (invited speaker)
- Program for Women in Mathematics: Examples of Groups, The Ohio State University, June 2008 (invited speaker)
- Cornell University:
Research Experience for Undergraduates Seminar, July 2008
Graduate Student Seminar, May 2008
Undergraduate Seminar, March 2008
- Mathematical Sciences Research Institute, Graduate Student Seminar, 2007
- University of Chicago, Graduate Student Seminar 2004, 2006, 2007

Conferences and Seminars Organised

- Topology Festival, Cornell University, 2008 and 2009 (2009 focus: Rigidity)
- AMS Special Session on Recent Progress in Geometric Group Theory, San Francisco CA, April 2009
- Postdoctoral Seminar at MSRI, Fall 2007
- Association for Women in Mathematics Student Chapter Colloquium, University of Chicago, 2006–2007
- Farb Student Seminar, University of Chicago, 2005–2006

Service

Reviewer for Mathscinet

Referee for “Groups, Geometry and Dynamics”

Co-founder and committee member, AWM Student Chapter, University of Chicago, 2005–2007

Volunteer at graduate student Warm-up Program, University of Chicago, 2003–2004, 2006

Personal

Citizenship: Australian

Date of birth: 11 January 1980