

Diane M. Vavrichek

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Education

- Ph.D. University of Michigan, Mathematics, August 2008.
Dissertation advisor: Peter Scott.
- B.A. Beloit College, Mathematics, Summa cum laude, May 2003.

Positions

- CRM-ISM Postdoctoral Fellow, Centre de Recherches Mathématiques, Fall 2010.
- Riley Assistant Professor, Binghamton University, Fall 2008 - present. (On leave Fall 2010.)
- Postdoctoral Fellow, French National Research Agency (ANR) Program on Geometric Group Theory, Summer 2009.

Research interest: Geometric group theory

Papers

- *Accessibility and JSJ decompositions of groups*. Ph.D. Thesis, University of Michigan, 2008.
- *Strong accessibility for hyperbolic groups*. Algebraic & Geometric Topology, 8(3): 1459-1480, 2008.
- *The quasi-isometry invariance of commensurizer subgroups*. Submitted, arXiv:1002.1265.
- *On the coarse geometric detection of subgroups*. Accepted to Geometriae Dedicata, arXiv:1006.2114.

Professional activities

Talks given

- Laboratoire de Combinatoire et d'Informatique Mathématique Seminar, Université du Québec à Montréal. December 2010.
- Montréal Geometric & Combinatorial Group Theory Seminar, McGill University. November 2010.

- Workshop on Geometric, Asymptotic and Combinatorial Group Theory with Applications, CRM, Canada. August 2010.
- Columbia University's Geometric Topology Seminar. April 2010.
- CUNY Graduate Center's Geometry and Topology Seminar. April 2010.
- Spring Topology and Dynamics Conference, Mississippi State University. March 2010.
- Lafayette/Lehigh Geometry and Topology Seminar (annual), Lafayette College. March 2010.
- Geometric Group Theory Conference (in honor of Mike Davis), Bedlewo, Poland. June 2009.
- Journées ANR de théorie géométrique des groupes Conference, IRMA, France. June 2009.
- University of Southampton's Pure Mathematics Colloquium. May 2009.
- University of Oklahoma's Karcher Colloquium. March 2009.
- Cornell University's Topology seminar. November 2008.
- SUNY Buffalo's Geometry and Topology seminar. October 2008.
- Spring Topology and Dynamics Conference, University of Wisconsin/Marquette University. March 2008.
- The Ohio State University's Geometric Group Theory Seminar. January 2008.
- AMS Spring Central Section Meeting, Special Session on Geometric Topology, Miami University. March 2007.
- IAS and Princeton University's Program for Women in Mathematics: Geometric Group Theory, May 2005.
- Nebraska Conference for Undergraduate Women in Mathematics, University of Nebraska. February 2003.

Conferences attended

- Equations and First-order Properties in Groups, CRM, Canada. October 2010.
- Group Actions and Dynamics, CRM. October 2010.
- Complexity and Group-based Cryptography, CRM. September 2010.
- Topics in Algorithmic and Geometric Group and Semigroup Theory, CRM. August 2010.
- Workshop on Geometric, Asymptotic and Combinatorial Group Theory with Applications, CRM. August 2010.
- Cornell Topology Festival, Cornell University. May 2010.

- Spring Topology and Dynamics Conference, Mississippi State University. March 2010.
- Geometric Group Theory Conference (in honor of Mike Davis), Bedlewo, Poland. June 2009.
- Journées ANR de théorie géométrique des groupes, IRMA, France. June 2009.
- Cornell Topology Festival, Cornell University. May 2009.
- Random Groups and Random Graphs, Bedlewo, Poland. June 2008.
- Workshop on Non Positive Curvature and the Elementary Theory of Free Groups, Anogia, Greece. June 2008.
- Spring Topology and Dynamics Conference, University of Wisconsin/Marquette University. March 2008.
- Topics in Teichmuller Theory and Kleinian Groups, MSRI. November 2007.
- Topics in Geometric Group Theory, MSRI. November 2007.
- Introduction to Geometric Group Theory, MSRI. August 2007.
- Introduction to Teichmuller Theory and Kleinian Groups, MSRI. August 2007.
- Aspects of Teichmuller Theory, University of Michigan. April 2007.
- Geometry and the Imagination (in honor of Bill Thurston), Princeton University. June 2007.
- AMS Spring Central Section Meeting, Miami University. March 2007.
- Conference on Teichmuller Theory and Kleinian Groups in honor of Dick Canary, University of Michigan. December 2006.
- Workshop on Geometric Methods in Group Theory, Carleton University. August 2006.
- Combinatorial and Geometric Group Theory, Vanderbilt University. May 2006.
- Future Directions in 3-Manifolds (in honor of Peter Scott), University of Michigan. October 2005.
- IAS and Princeton University's Program for Women in Mathematics: Geometric Group Theory, IAS. May 2005.
- Nebraska Conference for Undergraduate Women in Mathematics, University of Nebraska. February 2003.

Teaching experience

- Binghamton University
 - Instructor for Linear Algebra (undergraduate), Introduction to Proofs (undergraduate), Topics in Geometric Group Theory (graduate), Fall 2008 - Spring 2010.

- Course coordinator for Linear Algebra (up to five sections per semester taught by graduate students), Spring 2009 - Fall 2009.
- Faculty organizer of the Undergraduate Math Club, Fall 2009 - Spring 2010.
- University of Michigan
 - Instructor for Precalculus, Calculus I, Calculus II, Fall 2003 - Spring 2006.

Service

- Referee for “Transactions of the American Mathematical Society” and “Algebraic & Geometric Topology.”
- Co-organizer of UM Student Geometry/Topology Seminar, Fall 2005 - Spring 2006.
- Graduate student mentor, Fall 2003 - Fall 2007.
- Student member of faculty search committee, Department of Mathematics, Beloit College, Fall 2002.

Citizenship: United States