Genevieve S. Walsh

Department of Mathematics
Tufts University
Medford, MA 02155

Education and Degrees

- Ph.D. University of California at Davis, Mathematics. June 2003.
  Dissertation Advisor: W. P. Thurston.

- M.S. Auburn University, Mathematics. June 1997.
  Thesis Advisor: K. Kuperberg.

- Budapest Semesters in Mathematics. Fall 1994 and Spring 1995.

- B.A. Oberlin College, Mathematics with Honors. June 1994.

Areas of Specialization

Geometric Topology, Hyperbolic Geometry

Professional Affiliations

American Mathematical Society, Association of Women in Mathematics

Awards and Fellowships

- NSF VIGRE Postdoctoral Fellowship. University of Texas at Austin, 2003-2006.

- VIGRE Graduate Fellow. University of California at Davis, 2002-2003.

- Dissertation Year Fellow. University of California at Davis, 2001-2002.

- Alice Leung Scholarship. University of California at Davis. Spring 2000.

Academic Positions

- Assistant Professor, Tufts University. Fall 2006-present. (on leave Fall 2006)

- Postdoctoral Researcher, Université du Québec à Montréal. Fall 2006.

- VIGRE Postdoctoral Instructor, University of Texas at Austin. Fall 2003-Spring 2006.

- Postdoctoral Associate, Cornell University. Summer 2003.

Dissertation

- *Great circle links in the three-sphere.* June 2003. Advisor: W. P. Thurston.

Publications and Submitted Papers

- *Commensurability classes of two-bridge knot complements.* Joint with Alan Reid. Submitted. arXiv:math.GT/0612473.

- *Incompressible surfaces and spunnormal form.* Submitted. arXiv:math.GT/050302.

- *Three-manifolds, virtual homology, and group determinants.* Joint with Daryl Cooper. **Geom. Topol.**, Vol. 10 (2006) 2247-2269. arXiv:math.GT/0603152.

- *Virtually Haken fillings and semi-bundles.* Joint with Daryl Cooper. **Geom. Topol.**, Vol. 10 (2006) 2237-2245. arXiv:math.GT/0407328.

- *Great circle links and virtually fibered knots.* **Topology**, Vol. 44 (2005), No. 5, pp. 947-958. arXiv:math.GT/0407361.

- *Double bubbles in the three-torus.* Joint with Miguel Carrión Álvarez, Joseph Corneli and Shabnam Beheshti. **Experiment. Math.**, Vol. 12 (2003), No. 1, pp. 79-89. arXiv:math.DG/0208120.

Non-referreed

- *Surfaces in finite covers and the group determinant.* Part of the conference proceedings for *Low Dimensional Manifolds.* **Oberwolfach Reports** Vol. 2 (2005). (2 pages)

Special Conference Talks

- September 2006. The 2nd William Rowan Hamilton Geometry and Topology Workshop, "Surface Groups in Low Dimensional Topology and Geometric Group Theory". Dublin, Ireland.

- July 2006. Institute for Advanced Study/ Park City Math Institute Workshop, "Low Dimensional Topology". Park City, Utah.

- September 2005. Conference on Low-dimensional Manifolds. Oberwolfach, Germany.

- July 2005. "On Heegaard splittings of 3-manifolds" Conference. Technion, Haifa, Israel.

- March 2005. Spring Topology and Dynamical Systems Conference. (Semi-Plenary Talk) Berry College.

- May 2004. "Trends in three-manifolds" Conference. UQAM. Montreal, Canada.

- March 2004. Spring Topology and Dynamical Systems Conference. (Special Session Talk) UAB.

- October 2003. Texas Geometry and Topology Conference. Rice University.

- September 2003. "Topology in and around dimension three" Conference. Banff, Canada.

- June 2003. Georgia Topology Conference. University of Georgia.

Seminar Talks

- November 2006. 3- and 4-Manifolds Seminar, Michigan State University (+ special RTG talk). Lansing, Michigan.

- October 2006. Cascade Topology Seminar, Portland State University.

- October 2006. Geometric Group Theory Seminar, McGill University.

- September 2006. Topology Seminar, Université du Québec à Montréal.

- April 2006. Topology Seminar, Rice University.

- December 2005. Topology Seminar, University of British Columbia.

- December 2004. Topology Seminar, Washington University in St. Louis.

- November 2004. Topology Seminar, University of California at Davis.

- April 2004. Topology Seminar, Tulane University.

- January 2004, May 2006. Topology Seminar, University of California at Santa Barbara.

- November 2003. Topology Seminar, Columbia University.

- November 2003. Topology Seminar, Princeton University.

Math Society Meetings

- September 2006. Special Session on Low-dimensional Topology, Joint Meeting of the Canadian Math Society and the Sociedad Matemática Mexicana (SMM). Guanajuato, Mexico.

- December 2005. Canadian Math Society Meeting, "Topology" Session. Victoria, B. C.

- April 2005. Special Session on Geometric Methods in Three Dimensions. University of California at Santa Barbara.

- October 2004. Special Session on Geometry of Hyperbolic Manifolds. Vanderbilt University.

- May 2004. Special Session on Low Dimensional Topology. Joint Meeting of the AMS and the Sociedad Matemática Mexicana (SMM). Houston.

- January 2004. Special Session on Low Dimensional Topology. Phoenix, Arizona.

- October 2003. Special Session on Knots, Links, and Embedded Graphs. University of North Carolina at Chapel Hill.

General Math Audience Talks

- Millican colloquium talk: "Which three-manifold is the universe?", University of North Texas, May 2005.

Teaching Experience

- Instructor, University of Texas at Austin. Single and Multi-variable Calculus, Number Theory (Discovery Learning Style), Individual reading course on "Knots, links and three-manifolds", Graduate Topics Course: "Surfaces in three-manifolds".

- Associate Instructor and Teaching Assistant, University of California at Davis. Single and Multi-variable Calculus, Linear Algebra, Topology, Real Analysis.

Service

- Served on the VIGRE Graduate Management Team. 2004-2005, University of Texas at Austin.

- Referee for: **Algebr. Geom. Topol.**, **Amer. Math. Monthly**, **J. London Math. Soc.**

- Reviewer for Math Reviews.

- Indexed **The Geometry and Topology of Three-Manifolds**, W. P. Thurston's Princeton course notes.