

JASON DEBLOIS

Curriculum Vitae

University of Illinois at Chicago · Mathematics, Statistics, and Computer Science
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PERSONAL INFORMATION

Birth date April 26, 1978
Citizenship United States of America
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EDUCATION

B.S. (Mathematics) University of Chicago · June 2000
Ph.D. (Mathematics) University of Texas at Austin · May 2007.
ADVISOR: Alan W. Reid

POSITIONS AND AWARDS

Research Assistant Professor · University of Illinois–Chicago · August 2007–present
Mathematical Sciences Research Postdoctoral Fellow · National Science Foundation · August 2007–present
MSRI Postdoctoral Fellow · Mathematical Sciences Research Institute · Fall 2007
Visiting Scholar · University of Illinois–Chicago · Fall 2006
Visiting Professor · Centre Bernoulli, École Polytechnique Fédérale de Lausanne · September 2005
VIGRE Fellow · U.T. Austin · 2005–2006
Frank Gerth III Teaching Excellence Award Recipient · U.T. Austin · For the 2002–2003 school year.
Graduate Research Assistant (A. W. Reid) · U.T. Austin · Fall 2006, Summer 2005, Summer 2004, Summer 2003, Summer 2002
Assistant Instructor · U.T. Austin · Fall 2002–present
Teaching Assistant · U.T. Austin · Fall 2001–Spring 2002
University Preemptive Fellowship · U.T. Austin · Summer 2001
Graduate Research Assistant (C. McA. Gordon) · U.T. Austin · Spring 2001
Departmental Fellowship · U.T. Austin · Fall 2000 · Summer 2001

MATHEMATICAL WRITING

- 1 Algebraic invariants, mutation, and commensurability of link complements.
With E. Chesebro. Preprint.
- 2 Rank gradient of cyclic covers.
Submitted.
- 3 The cross curvature flow on a negatively curved solid torus.
With D. Knopf and A. Young. Submitted.
- 4 Some virtually special hyperbolic 3-manifolds.
With E. Chesebro and H. Wilton. Submitted.
- 5 Volume and topology of bounded and closed hyperbolic 3-manifolds.
With P. Shalen. Submitted.
- 6 Incompressible surfaces, hyperbolic volume, Heegaard genus, and homology.
With M. Culler and P. Shalen. *Communications in Analysis and Geometry*, Vol. 17, no. 2, 155–185.
- 7 On the doubled tetrus.
To appear, *Geometriae Dedicata*.
- 8 Totally geodesic surfaces and homology.
Algebraic and Geometric Topology. Vol. 6, 1413–1428.
- 9 Surface groups are frequently faithful.
With R. Kent. *Duke Mathematical Journal*. Vol. 131, no. 2, 351–362.
- 0 Totally geodesic surfaces in hyperbolic 3-manifolds
Ph.D. thesis, University of Texas at Austin.

TALKS

- *Rank gradient of cyclic covers* · October 8, 2009
Topology Seminar · University of Michigan
- *Rank gradient and the JSJ decomposition* · June 5, 2009
Workshop in Geometric Topology · Milwaukee, Wisconsin
- *Some virtually special 3-manifold groups* · February 23, 2009
Topology Seminar · University of Illinois at Chicago
- *Some virtually special 3-manifold groups* · January 22, 2009
Geometry/Topology Seminar · University of Chicago
- *Incompressible surfaces, hyperbolic volume, and homology* · June 27, 2008
Workshop in Geometric Topology · Park City, UT
- *Rank gradient of cyclic covers II* · February 13, 2008
Topology Seminar · University of Illinois at Chicago
- *Rank gradient of cyclic covers* · February 11, 2008
Topology Seminar · University of Illinois at Chicago
- *Rank gradient of covers with property τ* · September 21, 2007
Joint Postdoctoral Seminar · Mathematical Sciences Research Institute
- *Virtually fibering the doubled tetrus* · October 22, 2007
Topology Seminar · Rice University

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- *Commensurability of link complements* · November 7, 2006
Differential Geometry Seminar · University of Illinois at Urbana-Champaign
 - *Commensurability of link complements* · October 8, 2006
AMS Sectional Meeting · Salt Lake City, UT
 - *Totally geodesic surfaces in rational homology knot manifolds* · Sept. 18, 2006
Topology Seminar · University of Illinois at Chicago
 - *Commensurability vs. trace field of link complements* · September 11, 2006
Topology Seminar · University of Texas at Austin
 - *Surface groups are frequently faithful* · Fall 2005
Research Seminar · Centre Bernoulli, École Polytechnique Fédérale de Lausanne
 - *Totally geodesic surfaces and homology* · Fall 2005
Research Seminar · Centre Bernoulli, École Polytechnique Fédérale de Lausanne
 - *Surface groups are frequently faithful* · Fall 2004
Topology Seminar · University of Texas at Austin
 - *The hyperbolic Dehn surgery theorem* · Summer 2003
Qualifying examination · Topology Seminar · University of Texas at Austin
 - *Automorphisms of surfaces* · Spring 2002
Preliminary Examination · Topology Seminar · U.T. Austin
 - *Songs of splitting and systoles: an odyssey of triangular tiling groups* · Jan. 2000
(with N. Baeth, L. Powell, and K. Woods) · Joint Meetings · Washington, D.C.

TEACHING

- *Fall 2009* — M472: Group Actions on Cube Complexes
Instructor · University of Illinois at Chicago
- *Spring 2008* — M215: Calculus III
Instructor · University of Illinois at Chicago
- *Spring 2005* — M305G: Elementary Functions and Coordinate Geometry
Instructor · University of Texas at Austin
- *Fall 2004* — M305G: Elementary Functions and Coordinate Geometry
Instructor · University of Texas at Austin
- *Spring 2004* — M382D: Differential Topology
Grader · University of Texas at Austin
- *Fall 2003* — M305G: Elementary Functions and Coordinate Geometry
Instructor · University of Texas at Austin
- *Spring 2003* — M210E: Emerging Scholars Program
Instructor · University of Texas at Austin
- *Fall 2002* — M210E: Emerging Scholars Program
Instructor · University of Texas at Austin
- *Spring 2002* — M382D: Differential Topology
Grader · University of Texas at Austin
- *Fall 2001* — M427K: Differential Equations
Teaching Assistant · University of Texas at Austin

CONFERENCES ATTENDED

- Workshop in Geometric Topology · June 2009
University of Wisconsin - Milwaukee
- AMS Central Section Meeting, #1047 · March 2009
University of Illinois at Urbana-Champaign
- Workshop in Geometric Topology · June 2008
Park City, Utah
- Topics in Teichmüller Theory and Kleinian Groups · November 2007
Mathematical Sciences Research Institute · Berkeley, CA
- Program on Teichmüller Theory and Kleinian Groups · Aug.–Nov. 2007
Mathematical Sciences Research Institute · Berkeley, CA
- AMS Western Section Meeting, #1019 · October 2006
University of Utah
- Conference on 3–Manifolds and Knot Theory · May 2005
A conference in honor of the 60th birthday of Cameron Gordon · U.T. Austin
- Ahlfors Bers Colloquium · May 2005
University of Michigan
- AMS Central Section Meeting, #1001 · October 2004
Northwestern University
- The Synthetic Geometry of the Weil-Petersson Metric · May 2004
University of Utah
- Conference on the Topology of Manifolds of Dimensions 3 and 4 · May 2003
A conference in honor of the 60th birthday of Andrew Casson · U.T. Austin
- The Andrews-Curtis and the Poincaré Conjectures · April 2003
The Spring Lecture Series · University of Arkansas
- Spring Topology and Dynamics Conference · March 2002
University of Texas at Austin
- Joint Meetings · AMS Meeting #950 · January 2000
Washington D.C.

CONFERENCE CO-ORGANIZED (with N. Dunfield, C. Leininger and R. Kent)

Special Session on Hyperbolic Geometry and Teichmüller Theory · AMS Meeting #1047 · University of Illinois at Urbana-Champaign · March 27–29, 2009

REFERENCES

- Peter B. Shalen, University of Illinois at Chicago
- Alan W. Reid, University of Texas at Austin
- Richard Canary, University of Michigan
- Steven Kerckhoff, Stanford University
- Marc Culler, University of Illinois at Chicago
- Steven Hurder, University of Illinois at Chicago
(Concerns teaching)