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Education and Employment

L.E. Dickson Instructor - University of Chicago, Current
NSF Postdoc - University of Chicago, 2005-2006
NSF Postdoc - Cornell University, 2003-2005
Ph.D. Math - Columbia University, 1997-2003
B.S. Math - University of Chicago, 1993-1997

Thesis Advisor

Joan S. Birman

Papers and Preprints

Irreducible Sp-representations and subgroup distortion in the mapping class group, (with B. Farb and A. Putman *submitted*)
The Casson invariant and the word metric on the Torelli group, (with B. Farb and A. Putman *submitted*)
Calculating the image of the second Johnson-Morita representation, (with J. Birman and T. Brendle *submitted*)
Noncyclic covers of knot complements, *Geom. Dedicata* **111** (2005), 211–239.

Talks

Irreducible Sp-representations and distortion in the mapping class group

Summer 2007 Wasatch Topology Conference at the University of Utah, August 13, 2007

University of Chicago Geometry/Topology Seminar, August 3, 2007

Heegaard splittings and 3-manifold invariants from the Johnson-Morita homomorphisms

Joint AMS-MAA Meeting in New Orleans Special Session, January 8, 2007

Columbia University Topology Seminar, March 10, 2006

Ohio State University Topology Seminar, January 31, 2006

University of Chicago Geometry/Topology Seminar, November 22, 2005

Noncyclic covers of knot complements

Louisiana State University Topology Seminar, September 6, 2005

1001st AMS Meeting at Northwestern University, October 24, 2004

1000th AMS Meeting at the University of New Mexico, October 16, 2004

University of Illinois at Chicago Topology Seminar, March 12, 2004

University of Chicago Geometry/Topology Seminar, March 10, 2004

Buffalo University Topology Seminar, February 13, 2004

McMaster University Geometry & Topology Seminar, October 27, 2003

Binghamton University Geometry Topology Seminar, October 2, 2003

Cornell University Topology and Geometric Group Theory Seminar, September 9, 2003

986th AMS Meeting at the Courant Institute, Special Session, April 13th, 2003

Columbia University Geometric Topology Seminar, May 9, 2003

Teaching

University of Chicago

Homology of the mapping class group (**graduate course**)—*Spring 2007*

Introduction to algebraic topology—*Spring 2007*

Directed reading program—*Winter 2007*

Honors calculus I—*Fall 2006*

Intro to analysis and linear algebra—*Fall 2006*

Cornell University

Foliations (**graduate course**)—*Fall 2004*

Calculus for engineers—*Fall 2003*

Columbia University

Undergraduate seminar on Coxeter groups–*Spring 2003*

Undergraduate seminar on combinatorics–*Fall 2002*

Ordinary differential equations–*Summer 2002*

Undergraduate seminar on logic–*Fall 2001*

Calculus IIA–*Spring 2000, Summer 2000, Summer 2001*

Calculus IA–*Fall 1999*

Calculus for the social sciences II–*Summer 1999*

Conference Participation

International Congress of Mathematicians 2006, Madrid, August 22-30, 2006

Winter 2005 Wasatch Topology Conference (Park City, Utah), December 14-16, 2005

Cornell Topology Festival (**Co-organizer**), May 6-9, 2005

Conference on Braids, Links, and Mapping Class Groups in Honor of Joan Birman (Columbia U.) March 17-20, 2005

Cornell Topology Festival (**Co-organizer**), May 7-10, 2004

Albany Group Theory Conference, October 17-19, 2003

Cornell Topology Festival, May 1-4, 2003

Workshop on Groups and 3-manifolds at CRM, June 25-29, 2001

AMS Mathematical Challenges of the 21st Century at UCLA, August 7-12, 2000

Knots 2000 at the Korea Advanced Institute of Science and Technology, July 31-August 5, 2000