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## Education

Ph.D Mathematics, University of California, Santa Barbara. 2002  
Dissertation title: Period three actions on the three-sphere are standard.  
Advisor: Daryl Cooper.

MA Mathematics, University of California, Santa Barbara. 1997

Part III Mathematics, Cambridge University, UK. 1996

BA (Hons) Mathematics, Cambridge University, UK. 1995

## Appointments

CUNY College of Staten Island, Assistant Professor. 2009 - current

Doctoral Faculty, CUNY Graduate Center. 2011 - current

Oklahoma State University, Assistant Professor. 2006 - 2009

Université du Québec à Montréal, CRM Postdoctoral Fellowship. 2005 - 2006

California Institute of Technology, Taussky–Todd Instructor. 2003 - 2005

The University of Melbourne, Australia, Research Fellow. Apr - Dec 2002

## Grants

NSF grant DMS-0706764 (PI) 2007-2011

PSC–CUNY grant 60019-40 41 2010-11

## Publications and preprints

*Exponential decay in the mapping class group*, arXiv:1104.5543.

*Statistics and compression for scl*, arXiv:1008.4952, (with Danny Calegari).

*Asymptotics for pseudo-Anosov elements in Teichmüller lattices*, *Geom. Funct. Anal.* **20** (2010) 527–544.

*Random Heegaard splittings*, *Journal of Topology* (2010) **3** (4), 997–1025.

*Linear progress in the complex of curves*, *Trans. Amer. Math. Soc.* **362** (2010), 2963–2991.

*Random walks on the mapping class group*, *Duke Mathematical Journal*, Vol. 156, Number 3 (2011), 429–468.

*Heegaard gradient and virtual fibers*, *Geometry and Topology*, Vol. 9 (2005), 2227–2259.

*Period three actions on lens spaces*, *Algebr. Geom. Topol.*, Vol 7 (2007), pages 2021–2102.

*Period three actions on the three-sphere are standard*, *Geometry and Topology*, Vol. 7 (2003), 329–397 (with J. H. Rubinstein).

*Virtually embedded boundary slopes*, *Topology and its Applications*, (95) 1 (1999) 63–74.

**Recent conference talks**

- 2011 Aug Wasatch topology conference, “Exponential decay in the mapping class group.”
- 2011 Jun Conference in Geometric Group Theory and related topics, Ohio State University, “Exponential decay in the mapping class group.”
- 2011 May Billiards, flat surfaces and dynamics on moduli, Oberwolfach, “Asymptotics for pseudo-Anosov’s in Teichmüller lattices.”
- 2011 Apr AMS meeting, Holy Cross, “Growth rates for stable commutator length.”
- 2010 Jun Jacofest, Oklahoma State University, “Random Heegaard splittings.”
- 2010 May Cirget conference, UQAM Montreal, “Random Heegaard splittings.”
- 2010 May AMS meeting, NJIT, “Asymptotics for pseudo-Anosov’s in Teichmüller lattices.”
- 2010 May AMS meeting, NJIT, “Random Heegaard splittings.”
- 2009 Dec New directions in Geometric Group Theory, University of Queensland, “Asymptotics for pseudo-Anosov’s in Teichmüller lattices.”
- 2009 Dec New directions in Geometric Group Theory, University of Queensland, “What is . . . statistical group theory?”

**Recent seminar talks**

- 2011 Jul University of Queensland, “Growth rates for stable commutator length.”
- 2011 Jul University of Queensland, “Random walks on graphs and groups.”
- 2011 Apr Bowling Green State, “Random walks on graphs and groups.”
- 2011 Feb Yale, “Random walks on the mapping class group.”
- 2011 Feb Rutgers, “Growth rates for stable commutator length.”
- 2011 Jan Oklahoma State, “Growth rates for stable commutator length.”
- 2010 Dec ETH Zürich, “Growth rates for stable commutator length.”
- 2010 May Yale, “Asymptotics for pseudo-Anosov’s in Teichmüller lattices.”
- 2010 Mar Temple University, “Generic elements in the mapping class group.”
- 2009 Jun Tokyo Tech, “Surfaces groups and random walks.”
- 2009 Feb Columbia, “Random Heegaard splittings.”
- 2009 Feb University of Chicago, “Asymptotics for pseudo-Anosov’s in Teichmüller lattices.”

**Teaching Experience****Assistant Professor**, CUNY College of Staten Island.

Geometry.	Spring 2011
First semester calculus.	Fall 2010
Linear Algebra.	Spring 2010
Pre-calculus.	Spring 2010
Third semester calculus.	Fall 2009

**Assistant Professor**, Oklahoma State University.

Geometric topology, graduate class.	Fall 2008
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Third semester calculus.	Fall 2008
Hyperbolic geometry, graduate class.	Spring 2008
Second semester calculus.	Fall 2007
Linear algebra.	Spring 2007
Second semester calculus.	Fall 2006

**Instructor**, California Institute of Technology.

Algebraic Topology, graduate class.	Fall 2003 - Spring 2004
Differential Geometry, graduate class.	Spring 2003
Algebraic Topology, graduate class.	Winter 2003

**Teaching Associate**, University of California, Santa Barbara.

Differential Equations.	Fall 1998
Multivariable Calculus.	Summer 1997

**Other activities**

Visiting researcher at the Hausdorff Institute, Bonn. May-Jun 2010

Visiting assistant professor at the Tokyo Institute of Technology. May-Aug 2009

Referee for Bulletin of the London Mathematical Society, Communications in Analysis and Geometry, Experimental Mathematics, Geometriae Dedicata, Geometry and Topology, International Math Research Notices, Journal für die reine und angewandte Mathematik (Crelle's Journal), Proceedings of the AMS, and various conference proceedings.

**Website**

<http://www.math.csi.cuny.edu/~maher/>