

CONTACT INFORMATION	Mathematics Department The Pennsylvania State University State College, PA, 16801	PHONE: (740) 359-4381 EMAIL: <a href="mailto:brown@math.psu.edu">brown@math.psu.edu</a> WEBPAGE: <a href="http://www.personal.psu.edu/awb14">www.personal.psu.edu/awb14</a>
EDUCATION	<b>Ph.D., Mathematics, Tufts University</b> , May 2011 THESIS: <i>Rigid measures on the torus</i> ADVISOR: Boris Hasselblatt  <b>B.A., Oberlin College</b> , May 2004 MAJOR: Mathematics, Music History and Theory MINOR: Physics	
EMPLOYMENT	<b>The Pennsylvania State University</b> , Postdoc, Fall 2011–present Postdoctoral position partially funded through NSF Mathematical Sciences Postdoctoral Research Fellowship; NSF award #1104013. Course instructor (Fall 2013–Spring 2014)  <b>Tufts University</b> , Graduate Teaching Assistant, Fall 2006–Spring 2011 Course instructor and grader for undergraduate courses.	
PUBLICATIONS	ACCEPTED AND PUBLISHED	
	<i>Smooth stabilizers of measures on the torus</i> , Discrete and continuous dynamical systems, A. (Accepted for publication, 2013)	
	<i>Unstable periodic orbits in the Lorenz attractor</i> , Philosophical Transactions of the Royal Society A, <b>369</b> (2011), 2345–2353. Joint with Bruce M. Boghosian, Jonas Lätt, Hui Tang, Luis M. Fazendeiro, and Peter V. Coveney.	
	<i>Constraints on dynamics preserving certain hyperbolic sets</i> , Ergodic Theory and Dynamical Systems, <b>31</b> (2011), 719–739.	
	<i>Nonexpanding attractors: conjugacy to algebraic models and classification in 3-manifolds</i> , Journal of Modern Dynamics, <b>4</b> (2010), 517–548.	
	IN PREPARATION	
	<i>Measure rigidity for random surface diffeomorphisms</i> . Joint with Federico Rodriguez Hertz.	
	<i>Topological, smooth, and measure rigidity for actions of higher rank lattices</i> . Joint with Federico Rodriguez Hertz and Zhiren Wang.	
INVITED TALKS	<i>Topological, smooth, and measure rigidity for higher-rank lattice actions</i> . University of Chicago Dynamics Seminar, October 2013.	
	<i>Measure rigidity for random surface diffeomorphisms</i> . Indiana University Geometry Seminar, May 2013.	
	<i>Measure rigidity for random surface dynamics</i> . AMS Sectional Meeting, Boulder CO, April 2013.	
	<i>Rigidity of measures on the torus</i> . Randomness and Dynamics Mini-conference, Northeastern University, April 2011.	
	<i>Rigid measures on the torus</i> . AMS Southeastern Sectional Meeting: Special Session on Statistical Properties of Dynamical Systems, November 2010.	

*Rigid measures on the torus.* Boston University Dynamical Systems Seminar, November 2010.

*Rigid measures on the torus.* Fall Workshop in Dynamical Systems, Penn State University, October 2010.

*Rigid measures on the torus.* Northwestern University Dynamics Seminar, September 2010.

*Measures with small stabilizers.* Northeastern University Ergodic Theory Seminar, April 2010.

*Computing statistical averages via hyperbolic periodic orbits and dynamical zeta functions: application to the Lorenz attractor.* SIAM Annual Meeting, Denver CO, July 2009.

#### LOCAL TALKS

*Smooth and measure rigidity for actions of lattices in higher rank Lie groups.* Penn State Dynamics Working Seminar, Sept 2013

*Measure Rigidity for Random Surface Diffeomorphisms.* Center for Dynamics and Geometry Seminar, Penn State University, Sept 2013.

*Smooth Stabilizers of Measures on the Torus.* Center for Dynamics and Geometry Seminar, Penn State University, Sept 2011.

#### CONFERENCES AND WORKSHOPS ATTENDED

Hyperbolicity and dimension. CIRM, Marseilles, France, December 2013

Rigidity and group actions, Summer School. Paris, France, June 2013.

International Conference: Beyond Uniform Hyperbolicity. Będlewo, Poland, May–June 2013.

Large deviations and thermodynamical formalism, Workshop and Conference. EPFL–CIB, Lausanne, Switzerland, March 2013

Progress and Problems in Dynamics. Houston, TX, May 2012.

Dynamische Systeme 2011, Workshop at the Mathematisches Forschungsinstitut Oberwolfach. Oberwolfach, Germany, July 2011.

Fields Institute Workshop on Recent Advances on Topological and Measure Theoretic Methods in Dynamical Systems. North Bay, Ontario, May 2010.

Progress in Dynamics. Paris, France, November 2009.

Industrial Mathematical & Statistical Modeling Workshop for Graduate Students. North Carolina State University, Raleigh NC, July 2009.

Dynamical Systems: Geometric Structures and Rigidity (Summer Workshop for Graduate Students). Będlewo, Poland, July 2008.

Summer Graduate Program. Mathematical Biosciences Institute, Ohio State University, July–August 2007.

#### TEACHING EXPERIENCE

Real Analysis (*Scheduled*). Penn State University, Math 403; Spring 2014)

Matrices (Penn State University, Math 220; Fall 2013)

Multivariable calculus (Tufts University, Math 13; 6 semesters)

Calculus I, (Tufts University, Math 11; 2 semesters)

Introduction to calculus. (Tufts University, Math 05; 1 semester)