

Paul Wright

CONTACT INFORMATION	University of Maryland Department of Mathematics 1301 Mathematics Building College Park, MD 20742 USA	Phone: (301) 405-5069 Fax: (301) 314-0827 http://www.math.umd.edu/~paulrite
RESEARCH INTERESTS	Dynamical systems, ergodic theory, and probability – especially chaotic systems, hyperbolicity, and applications to mathematical physics.	
EMPLOYMENT HISTORY	University of Maryland, College Park Postdoctoral Research Fellow, August 2007 – January 2012, with partial support coming from an NSF Mathematical Sciences Postdoctoral Research Fellowship	
EDUCATION	Courant Institute of Mathematical Sciences, New York University Ph.D. in Mathematics, May 2007 <ul style="list-style-type: none">• Dissertation Topic: <i>Rigorous Results for the Periodic Oscillation of an Adiabatic Piston</i>• Advisor: Lai-Sang Young• National Science Foundation Graduate Research Fellow M.S. in Mathematics, May 2005 University of California at Berkeley B.A. in Mathematics and Minor in Physics, May 2002 <ul style="list-style-type: none">• Valedictorian and highest honors in mathematics• Highest distinction in general scholarship	
PUBLICATIONS	Behavior of the Escape Rate Function in Hyperbolic Dynamical Systems , submitted. (with M. Demers) Entropy, Lyapunov Exponents and Escape Rates in Open Systems , to appear in <i>Ergodic Theory and Dynamical Systems</i> . (with M. Demers and L.-S. Young) The Diffusion Coefficient for Piecewise Expanding Maps of the Interval with Metastable States , to appear in <i>Stochastics and Dynamics</i> . (with D. Dolgopyat) Approximating Invariant Densities of Metastable Systems , <i>Ergodic Theory and Dynamical Systems</i> available on CJO 2 September 2010. (with C. González Tokman and B. Hunt) Escape Rates and Physically Relevant Measures for Billiards with Small Holes , <i>Communications in Mathematical Physics</i> 294 (2010), no. 2, 353-388. (with M. Demers and L.-S. Young) The Periodic Oscillation of an Adiabatic Piston in Two or Three Dimensions , <i>Communications in Mathematical Physics</i> 275 (2007), no. 2, 553-580. A Simple Piston Problem in One Dimension , <i>Nonlinearity</i> 19 (2006), 2365-2389. Semiclassical Generalization of the Darboux-Christoffel Formula , <i>Journal of Mathematical Physics</i> 43 (2002), no. 10, 4668-4680. (with R. Littlejohn)	
EXTERNAL FUNDING	2007–2010	National Science Foundation Mathematical Sciences Postdoctoral Research Fellowship, \$108,000
	2002–2006	National Science Foundation Graduate Research Fellowship, \$96,000

HONORS	2002–2007	Henry MacCracken Fellowship, New York University Graduate School of Arts and Sciences		
	May 2002	Valedictorian, Mathematics Department, University of California at Berkeley		
	1998–2002	Chancellor’s Scholar, University of California at Berkeley		
	1998–2002	National Merit Scholar		
ADMINISTRATIVE SERVICE	2007–2011	Organizer, Dynamical Systems Seminar, University of Maryland; see http://www.math.umd.edu/research/seminars/dynamics/		
	2007–2009	Organizer, Student Dynamical Systems Seminar, University of Maryland; see http://www.math.umd.edu/research/seminars/dynamics/RIT.html		
	2004–2007	Organizer, Dynamical Systems Mini-seminar, Courant Institute of Mathematical Sciences, New York University		
TEACHING EXPERIENCE	Fall 2011	Elementary Calculus I Lecturer (large section)		
	Spring 2011	Elementary Calculus I Lecturer (large section)		
	Fall 2009	Differential Equations for Scientists and Engineers Lecturer (honors section)		
	Spring 2009	Elementary Calculus I Lecturer (large section)		
	Fall 2008	Elementary Calculus I Lecturer (large section)		
	Spring 2007	Discrete Mathematics Lecturer		
	Fall 2006	Discrete Mathematics Lecturer		
	Spring 2005	Calculus I Lecturer		
	Spring 2002	Multivariable Calculus Teaching Assistant		
	Fall 2001	Linear Algebra and Differential Equations Teaching Assistant		
INVITED TALKS (SELECTED)	Dynamische Systeme, Mathematisches Forschungsinstitut Oberwolfach, Germany, July 2009; <i>Billiards with small holes</i> .			
	Semester on Hyperbolic Dynamical Systems, Erwin Schrödinger Institute, Vienna, June 2008; <i>Some rigorous results for the periodic oscillation of an adiabatic piston</i> .			
	Midwest Dynamical Systems Seminar, Indiana University - Purdue University Indianapolis, October 2006; <i>Some rigorous results for a simple model of the adiabatic piston problem</i> .			
	Workshop on Dynamical Systems and Related Topics, University of Maryland, College Park, March 2006; <i>A simple piston problem</i> .			
	Séminaire interne, École normale supérieure de Lyon, France, December 2005; <i>The notorious piston problem and some recent results obtained by averaging</i> .			
	Young Person’s Seminar, Time at work trimester on dynamical systems, Institut Henri Poincaré, Paris, France, July 2005; <i>Anosov’s averaging theorem and an application</i> .			
GRADUATE COURSEWORK	<input type="checkbox"/>	Dynamical Systems	<input type="checkbox"/>	Real Analysis
	<input type="checkbox"/>	Ergodic Theory	<input type="checkbox"/>	Complex Analysis
	<input type="checkbox"/>	Probability/Limit Theorems	<input type="checkbox"/>	Differential Geometry
	<input type="checkbox"/>	Partial Differential Equations	<input type="checkbox"/>	Topology
	<input type="checkbox"/>	Ordinary Differential Equations	<input type="checkbox"/>	Linear Algebra
	<input type="checkbox"/>	Harmonic Analysis		

PHYSICAL SCIENCES RESEARCH EXPERIENCE	2001–2002	Production of discrete variable representation sets. Advisor: Robert Littlejohn, Department of Physics, University of California at Berkeley.
	2000–2001	Creation of signal processing algorithms for the Gamma Ray Energy Tracking Array. Advisor: Kai Vetter, Nuclear Structures Group, E. O. Lawrence Berkeley National Laboratory.
	1999–2000	Laser spectroscopy investigations of the reaction dynamics of HFCO. Advisor: C. Bradley Moore, Department of Chemistry, University of California at Berkeley.

PROFESSIONAL AFFILIATIONS American Mathematical Society (since 2008)

REFERENCES **Dmitry Dolgopyat**, Professor of Mathematics, University of Maryland, College Park, (301) 405-5118, dmitry@math.umd.edu (Postdoctoral Sponsor)

Carlangelo Liverani, Professor of Mathematics, Università degli Studi di Roma “Tor Vergata,” Rome, Italy, liverani@mat.uniroma2.it

James Yorke, Distinguished University Professor of Mathematics and Physics and Chair of Mathematics, University of Maryland, College Park, (301) 405-5051, yorke@umd.edu

Lai-Sang Young, The Henry and Lucy Moses Professor of Science, Courant Institute of Mathematical Sciences, New York University, (212) 998-3286, lsy@cims.nyu.edu (Doctoral Advisor)