

CURRICULUM VITAE: JAYADEV S. ATHREYA

1. PERSONAL INFORMATION

- **Name:** Jayadev Siddhanta Athreya
- **Date of Birth** June 27, 1983
- **Place of Birth** Ames, IA
- **Citizenship** USA
- **Address:** Department of Mathematics, Yale University, PO Box 208283
New Haven, CT 06520-8283
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2. POSITIONS HELD:

- From August 2010, Assistant Professor, University of Illinois, Department of Mathematics.
- July 2009-July 2010: Gibbs Instructor, Yale University, Department of Mathematics
- July 2008-July 2009, Lecturer, Yale University, Department of Mathematics.
- July 2007-June 2008: Instructor, Princeton University, Department of Mathematics
- July 2006- June 2007, Lecturer, Yale University, Department of Mathematics.

3. VISITING POSITIONS

- Maitre de Conference, University of Rennes, June 2009
- Maitre de Conference, University of Rennes, May 2008

4. GRANTS/AWARDS:

- NSF Postdoctoral Fellowship, awarded Spring 2006. Grant number: DMS 0603636.
- London Mathematical Society, visiting fellowship, May-June 2009.

5. DEGREES

- Ph.D. in Mathematics, University of Chicago, under Prof. Alex Eskin, June 2006.
- Masters Degree in Mathematics, University of Chicago, December 2001
- Bachelor's Degree in Mathematics, Iowa State University, with Honors and Distinction, May 2000

6. SELECTED PUBLICATIONS AND PREPRINTS

- Athreya, Jayadev S.; Forni, Giovanni. Deviation for rational-angled billiards, *Duke Math. J.* Volume 144, Number 2 (2008), 285-319.
- Athreya, Jayadev S.; Margulis, Gregory. Logarithm laws for unipotent flows, I. To appear in *Journal of Modern Dynamics*.
- Athreya, Jayadev S.; Bufetov, Alexander; Eskin, Alex; Mirzakhani, Maryam. Lattice Point Asymptotics and Volume Growth on Teichmuller space, preprint. math.DS/0610715v1
- Athreya, Jayadev S.; Margulis, Gregory. Logarithm laws for unipotent flows, II. In preparation.
- Athreya, Jayadev S.; Eskin, Alex; Zorich, Anton. Rectangular billiards and volumes of spaces of quadratic differentials, in preparation.
- Athreya, Jayadev S. Quantitative recurrence and large deviations for Teichmuller geodesic flow, *Geometriae Dedicata* (2006), v. 119, 121-140.
- Athreya, Jayadev S.; Ghosh, Anish; Prasad, Amritanshu. Ultrametric Logarithm Laws I, *Discrete and Continuous Dynamical Systems-S*, v. 2, no. 2, 337-348, 2009.
- Athreya, Jayadev S. Logarithm laws and shrinking target properties, to appear in *Proceedings of Indian Academy of Sciences*.
- Athreya, Jayadev S.; Ghosh, Anish; Prasad, Amrtianshu, Ultrametric Logarithm Laws II, in preparation.
- Athreya, Jayadev S.; Sethuraman, Sunder. On the asymptotics of discrete order statistics. *Statist. Probab. Lett.* 54 (2001), no. 3, 243-249
- Athreya, Jayadev S.; Fidkowski, Lukasz M. Number theory, balls in boxes, and the asymptotic uniqueness of maximal discrete order statistics. *Integers* (2000), A3, 5 pp. (electronic).
- Athreya, Jayadev S.; Godbole, Anant; Johnston, Michelle; Maia, Jessica. Random Sperner systems. in preparation.

7. INVITED LECTURES

- July 2009, Colloquium, Indian Statistical Institute, Bangalore.
- July 2009, Colloquium, Indian Institute of Science, Bangalore.
- June 2009, Ergodic Theory seminar, University of East Anglia.
- June 2009, Ergodic Theory seminar, University of Warwick.
- May 2009, Ergodic Theory seminar, Bristol University.
- April 2009, Colloquium, University of Illinois Urbana-Champaign.
- April 2009, Invited Speaker, Maryland Dynamical Systems Workshop, University of Maryland, College Park.
- February 2009, Colloquium, Warwick University.
- January 2009, Colloquium, University of Texas, Austin.
- January 2009, Colloquium, Ohio Sate University.
- January 2009, Colloquium, Boston College.
- January 2009, special session on Dynamics on homogeneous spaces, AMS/MAA joint meetings, Washington, D.C.
- October 2008, Algebra seminar, University of Virginia.
- October 2008, Dynamics seminar, Penn State University.
- September 2008, Colloquium, Rice University.
- September 2008, Group Actions seminar, Yale University.

- September 2008, Topology Seminar, Yale University.
- July 2008, Colloquium, Indian Institute of Science, Bangalore.
- May 2008, Colloquium, Universitat Karlsruhe, Karlsruhe, Germany.
- March 2008, Conference in honor of Michael Brin's 60th birthday, University of Maryland, College Park.
- March 2008, Ergodic Theory seminar, Princeton University.
- March 2008, Mapping class groups dynamics seminar, Princeton University.
- December 2007, Conference on Groups and Measures, TIFR, Mumbai, India
- November 2007, Ergodic Theory seminar, Princeton University.
- November 2007, Topology seminar, Yale University.
- July 2007, Ergodic Theory seminar, Technion, Haifa.
- July 2007, Ergodic Theory seminar, Hebrew University, Jerusalem.
- July 2007, Teichmuller theory seminar, Marseilles
- June 2007, Workshop on diophantine approximation, Pisa (part of Clay Summer School).
- May 2007, Ergodic Theory seminar, Ohio State University.
- March 2007, Colloquium, Institute for Mathematical Sciences, Chennai.
- March 2007, Colloquium, Indian Statistical Institute, Bangalore.
- January 2007, Colloquium, Brandies University.
- January 2007, Colloquium, Ben Gurion University, Be'er Sheva.
- January 2007, Workshop on Dynamics of Lie Group Actions on Parameter Spaces, Sde Boker.
- December 2006, Special session on Dynamical Systems, Canadian Mathematical Society Annual meeting, Toronto.
- November 2006, Algebraic Geometry/Ergodic Theory seminar, Rice University.
- November 2006, Dynamical Systems seminar, University of Texas
- October 2006, Special session on Teichmuller theory and Hyperbolic Geometry, AMS sectional meeting, Storrs, Conn.
- October 2006, Group Actions seminar, Yale University
- October 2006, Colloquium, Iowa State University
- October 2006, Geometry seminar, University of Chicago.
- September 2006, Geometry seminar, Brown University
- August 2006, seminar, Tata Institute for Fundamental Research, Mumbai.
- July 2006, Colloquium, Indian Statistical Institute, Bangalore.
- July 2006, Seminar, Indian Institute of Science, Bangalore.
- May 2006, Colloquium, Iowa State University.
- May 2006, Invited speaker, International Workshop on Global Dynamics Beyond Uniform Hyperbolicity, Chicago.
- February 2006, Geometry seminar and Dynamics seminar, Indiana University
- January 2006, Dynamics seminar, Pennsylvania State University.
- November 2005, Conference on geometric and probabilistic methods in group theory and dynamical systems, College Station, Texas.
- October 2005, Global Analysis and Dynamics seminar, University of Chicago.
- May 2005, Tata Institute of Fundamental Research, Mumbai.

- June 2003, Summer school on Dynamics in the Teichmuller space and applications to rational billiards, CIRM, Luminy.

8. CONFERENCES, WORKSHOPS, AND SUMMER PROGRAMS ORGANIZED

- April 2009, special session on Lie group actions, Teichmüller flows and Number Theory, AMS Western section meeting, San Francisco, CA, organized with Y. Cheung and A. Zorich.
- January-February 2008, Workshop on Shrinking Target Properties, Clay Mathematics Institute and Brandeis University, organized with A. Ghosh, D. Kleinbock, D. Ellwood.

9. CONFERENCES, WORKSHOPS, AND SUMMER PROGRAMS ATTENDED

- June 2009, Conference in honor of Howard Masur's 60th birthday, CIRM, Luminy.
- April 2009, special session on Lie group actions, Teichmüller flows and Number Theory, AMS Western section meeting, San Francisco, CA.
- April 2009, Maryland Dynamical Systems Workshop, University of Maryland, College Park, M.D.
- January 2009, special session on Dynamics on homogeneous spaces, AMS/MAA joint meetings, Washington, D.C.
- December 2008, Indo-French conference on Mathematics, Institute for Mathematical Sciences, Chennai.
- June 2008, Dynamics on Teichmüller space, Roscoff, France.
- March 2008, Conference in honor of the 60th birthday of Michael Brin, College Park, MD.
- December 2007, Conference on Groups and Measures, in honor of the 60th birthday of S. G. Dani, TIFR, Mumbai.
- June-July 2007, Summer school on Homogeneous flows, moduli spaces, and arithmetic, CRM Ennio di Giorgi, Pisa, Italy.
- February 2007, Outerspace and Teichmuller space, CIRM, Luminy.
- January 2007, Workshop on dynamics of Lie group actions on parameter spaces, Sde Boker, Israel. Barak Weiss, organizer.
- December 2006, Canadian Mathematical Society annual meeting, special session on Differentiable dynamics and Ergodic theory, Toronto, ON.
- October 2006, AMS Sectional meeting, special session on Teichmuller spaces and hyperbolic geometry, Storrs, CT.
- May 2006, International Workshop on Global Dynamics Beyond Uniform Hyperbolicity, Chicago, IL. A. Wilkinson, K. Burns, M. Viana, and C. Bonatti, organizers.
- February 2006, Conference in honor of the 60th birthday of G. A. Margulis, Yale University, New Haven, CT.
- January 2006, Workshop on Partially hyperbolic dynamics, laminations, and Teichmuller flow, Fields Institute, Toronto, Ontario. M. Lyubich, G. Forni, C. Pugh, M. Shub, organizers.
- November 2005, Conference on geometric and probabilistic methods in group theory and dynamical systems, College Station, Texas. Rotislav Grigorchuk, Gilles Pisier, Zoran Sunik, organizers.

- July 2005, SMS-Nato Summer School on Equidistribution in Number Theory, Montreal, Quebec. Zeev Rudnick and Andrew Granville, organizers.
- June 2004, Minicourse on billiards and flat surfaces, Chicago, IL. Alex Eskin and Howard Masur, organizers.
- April 2004, Conference on combinatorial topology in mapping class groups, Chicago, IL. Howard Masur, organizer.
- December 2003, The Joint AMS-India Mathematics Meeting, Bangalore, India.
- Nov 2003, Conference on Teichmuller space and moduli space, Chicago, IL. Howard Masur, organizer.
- October 2003, Semi-annual Workshop on dynamical systems and related topics, State College, PA.
- July 2003, Minicourse on mapping class groups and Teichmuller space, Chicago, IL. Benson Farb and Howard Masur, organizers.
- June-July 2003, Dynamics in the Teichmuller Space And Applications to Rational Billiards, summer school and conference, CIRM, Luminy, France. Alex Eskin, Pascal Hubert, Anton Zorich, and Howard Masur, organizers.
- April 2003, AMS sectional meeting, Bloomington, IN.
- May 2002, Cornell Topology Festival, Ithaca, NY.
- March 2002, AMS sectional meeting, Ann Arbor, MI.

10. REFERENCES

- Alex Eskin, Department of Mathematics, University of Chicago, eskin@math.uchicago.edu.
- Howard Masur, Department of Mathematics, University of Chicago, masur@math.uchicago.edu.
- Giovanni Forni, Department of Mathematics, Maryland, forni@math.umd.edu.
- Benson Farb, Department of Mathematics, University of Chicago, farb@math.uchicago.edu.
- Dmitry Kleinbock, Department of Mathematics, Brandeis University, kleinbock@brandeis.edu
- Yair Minsky, Department of Mathematics, Yale University, yair.minsky@yale.edu
- Anton Zorich, Department of Mathematics, Universite de Rennes, Anton.Zorich@univ-rennes1.fr.
- John Smillie, Department of Mathematics, Cornell University, jds28@cornell.edu
- Barak Weiss, Department of Mathematics, Ben Gurion University, barakw@cs.bgu.ac.il
- Diane Herrmann (teaching reference), Department of Mathematics, University of Chicago, diane@math.uchicago.edu.
- Ana Cannas da Silva (teaching reference), Department of Mathematics, Princeton University, acannas@math.princeton.edu

11. TEACHING EXPERIENCE

- Fall 2009: Instructor, Math 230a (Vector Calculus and Linear Algebra), Yale University.
- Fall 2008: Instructor, Math 118a (Introduction to Functions of Several Variables), Yale University.
- Fall 2008: Instructor, Math 244a (Discrete Mathematics), Yale University.
- Spring 2008, supervisor, junior thesis (for Cameron Marantz and James Burgess), Princeton University.

- Spring 2008: Instructor, Math 202 (Introduction to Linear Algebra), Princeton University.
- Fall 2007: Instructor, Junior Seminar on Diophantine Approximation, Princeton University.
- Winter 2006: Mentor (to Kasia Wasilewska), Directed Reading Program, University of Chicago.
- Spring 2005: Mentor (to Aaron), Directed Reading Program, University of Chicago
- Winter 2005: Mentor (to Adam Yavitz), Directed Reading Program, University of Chicago
- Winter-Spring 2004: Instructor, Math 131-132 (lower level Calculus sequence), University of Chicago.
- Fall 2002-Spring 2003: Instructor, Math 151-153 (Calculus sequence), University of Chicago.
- Spring 2002: College Fellow for Math 242 (Algebraic Number Theory); Nils Nygaard, instructor. University of Chicago.
- Fall 2001-Winter 2002: College Fellow for Math 203-4 (Analysis in \mathbb{R}^n ; Leonid Ryzhik, instructor. University of Chicago.