

JAYADEV SIDDHANTA ATHREYA

PERSONAL INFORMATION

Name: Jayadev Siddhanta Athreya
Citizenship: USA
Affiliation: Department of Mathematics, University of Washington
Email: jathreya@uw.edu

EMPLOYMENT

August 2015- current: Associate Professor, University of Washington, Department of Mathematics
August 2015-current: Founder and Director, Washington Experimental Mathematics Lab.
August 2010-July 2015: Assistant Professor, University of Illinois, Department of Mathematics.
August 2011-current: Founder and Director, Illinois Geometry Lab.
July 2008-July 2010: Gibbs Instructor, 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.

DEGREES

Ph.D: Mathematics, University of Chicago, under Prof. Alex Eskin, June 2006.
M.Sc: Mathematics, University of Chicago, December 2001
B.Sc: Mathematics, Iowa State University, with Honors and Distinction, May 2000

GRANTS AND AWARDS

NSF CAREER Grant: DMS 1351853, Summer 2014-Summer 2019, \$450,000.
NSF Workforce Program Grant: with Matthew Ando and Jennifer McNeilly, Summer 2015-Summer 2018, \$ 600,000
Simpson Center Collaboration Grant: with Timea Tihanyi, 2016-17.
NSF PI grant: DMS 1069153, Summer 2011- Summer 2014, \$149,702.
Center for Advanced Study Fellowship: University of Illinois, Spring 2013.
Public Engagement Grant: University of Illinois, Spring 2013 and Spring 2014.
Interdisciplinary Innovation Initiative: University of Illinois, with Shen Dillon, John Lambros and Ioannis Chasiotis, College of Engineering, 2012-13.
N. Tenney Peck Teaching Award: Department of Mathematics, University of Illinois, Spring 2012.
Campus Research Board: University of Illinois, Fall 2011-Spring 2012 and Spring-Fall 2014.
NSF Postdoctoral Fellowship: June 2006-June 2009. Grant number: DMS 0603636.
London Mathematical Society: Visiting Fellowship, May-June 2009.

PH.D. ADVISING

- (1) Ioannis Konstantoulas, Ph.D. University of Illinois, 2014, currently Wylie Assistant Professor at University of Utah.
- (2) Grace Work, Ph.D., University of Illinois, 2016 (expected).
- (3) Dia Taha, current student at University of Washington.

PUBLICATIONS

- (1) Athreya, Jayadev S.; Eskin, Alex; Zorich, Anton. Right-angled billiards and volumes of the moduli spaces of quadratic differentials on $\mathbb{C}P^1$, to appear, *Annales Ecole Normale Superieure*, 72 pages.
- (2) Athreya, Jayadev S.; Gap distributions and homogeneous dynamics, *Proceedings of the ICM Satellite Conference on Geometry, Topology, and Dynamics in Negative Curvature (London Mathematical Society Lecture Notes Series)*, 2016.
- (3) Athreya, Jayadev S.; Chaubey, Sneha; Malik, Amita; Zaharescu, Alexandru; Geometric statistics of Ford circles. *New York Journal of Mathematics* 21 (2015) 637-656.
- (4) Athreya, Jayadev S.; Chaika, Jon. The Hausdorff Dimension of Non-Uniquely Ergodic directions in $H(2)$ is almost everywhere $1/2$, *Geometry and Topology* 19 (2015) 3537-3563.
- (5) Athreya, Jayadev S.; Cobeli, Cristian; Zaharescu, Alexandru. Radial density in Apollonian packings, *International Math Research Notices*, 2014.
- (6) Athreya, Jayadev S.; Ghosh, Anish; Tseng, Jimmy. Spherical averages of Siegel transforms and spiraling of lattice approximations. *Journal of London Mathematical Society, Journal of London Mathematical Society*, (2015) 91 (2).
- (7) Athreya, Jayadev S.; Random Affine Lattices, *Contemporary Mathematics*, volume 639, 169-174, 2015.
- (8) Athreya, Jayadev S.; Chaika, Jon; Lelievre, Samuel. Gap distribution for saddle connections in the golden L, *Contemporary Mathematics*, volume 631, 47-62, 2015.
- (9) Athreya, Jayadev S.; Eskin, Alex; Zorich, Anton. Counting generalized Jenkins-Strebel differentials. *Geometriae Dedicata*, 2013.
- (10) Athreya, Jayadev S.; Paulin, Frederic. Logarithm laws for strong unstable foliations in negative curvature and non-Archimedean Diophantine approximation. *Groups, Geometry, and Dynamics* Volume 8, Issue 2, 2014, pp. 285-309
- (11) Athreya, Jayadev S.; Cheung, Yitwah. A Poincaré section for horocycle flow on the space of lattices, *International Math Research Notices*, 2014, no. 10, 2643-2690.
- (12) Athreya, Jayadev S.; Ghosh, Anish; Prasad, Amritanshu, Buildings, Extensions, and Volume Growth Entropy, *New York Journal of Mathematics*, Volume 19 (2013) 1-11.
- (13) Athreya, Jayadev S.; Boshertizan, Michael. Ergodic properties of compositions of Interval Exchange Maps and Rotations, *Nonlinearity* 26 (2013) 417-423.
- (14) Athreya, Jayadev S.; Cusp excursions on parameter spaces, *Journal of London Math Society*, (2013) 87 (3): 741-765.
- (15) Athreya, Jayadev S.; Chaika, Jon. The distribution of gaps for saddle connection directions, *Geometric and Functional Analysis*, Volume 22, Issue 6 (2012), 1491-1516.
- (16) Athreya, Jayadev S.; Bufetov, Alexander; Eskin, Alex; Mirzakhani, Maryam. Lattice Point Asymptotics and Volume Growth on Teichmuller space, *Duke Math. J.* Volume 161, Number 6 (2012), 1055-1111.
- (17) Athreya, Jayadev S.; Ghosh, Anish; Prasad, Amrtianshu, Ultrametric Logarithm Laws II, *Monat. Math.*, Volume 167, Issue 3 (2012), Page 333-356
- (18) Athreya, Jayadev S.; Margulis, Gregory. Logarithm laws for unipotent flows, I. *Journal of Modern Dynamics*, volume 3, Number 3 (2009), 359-378
- (19) Athreya, Jayadev S.; Ghosh, Anish; Prasad, Amritanshu. Ultrametric Logarithm Laws I, *Discrete and Continuous Dynamical Systems-S*, v. 2, no. 2, 337-348, 2009.
- (20) Athreya, Jayadev S. Logarithm laws and shrinking target properties, *Proceedings of Indian Academy of Sciences (Math. Sci.)*, Vol. 119, No. 4, September 2009, pp. 541-557.
- (21) Athreya, Jayadev S.; Forni, Giovanni. Deviation for rational-angled billiards, *Duke Math. J.* Volume 144, Number 2 (2008), 285-319.
- (22) Athreya, Jayadev S. Quantitative recurrence and large deviations for Teichmuller geodesic flow, *Geometriae Dedicata* (2006), v. 119, 121-140.
- (23) Athreya, Jayadev S.; Sethuraman, Sunder. On the asymptotics of discrete order statistics. *Statist. Probab. Lett.* 54 (2001), no. 3, 243-249
- (24) 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).