Alex Eskin

Curriculum Vitae

Contact

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Personal

Date of Birth: May 19, 1965, Moscow USSR.

Citizenship: U.S.

Higher Education

6/86: B.S. in mathematics, summa cum laude, from UCLA.

9/86-6/89: Graduate student in physics, MIT.

9/89-6/91: Graduate student in mathematics, Stanford University.

6/93: Ph.D in mathematics, Princeton University.
Advisor: Peter Sarnak.
Title: "Counting Lattice Points on Homogeneous Varieties".

Academic Positions

9/93-6/94: Member, Institute of Advanced Study, Princeton.

9/94-6/96: Dickson Instructor, University of Chicago.

9/96-6/98: Asscociate Professor, University of Chicago.

9/98-6/12: Professor, University of Chicago.

9/12-Present: Arthur Holly Compton Distinguished Service Professor, University of Chicago.

Awards Recieved

1991-1992: DOE Scholarship.

1992-1993: Sloan Fellowship.

1994-1996: NSF Postdoctoral Research Fellowship.

1997-2002: Packard Fellowship.

1998:	Invited Speaker, International Congress of Mathematicians, Berlin
2007:	Clay Research Award.
2010:	Invited Speaker, International Congress of Mathematicians, Hyderabad
2011:	Member, American Academy of Arts and Sciences.
2014:	Simons Investigator Award.
2015:	Member, National Academy of Sciences.

Research Interests

Dynamics and geometry of Teichmüller space, billiards in rational polygons.

Dynamical systems of geometric orgin.

Geometric group theory.

Lie Groups, discrete groups, ergodic theory, applications to number theory.

Bibliography

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Mladen Bestvina, Alex Eskin, and Kevin Wortman. Filling boundaries of coarse manifolds in semisimple and solvable arithmetic groups. *J. Eur. Math. Soc. (JEMS)*, 15(6):2165–2195, 2013.

Alex Eskin, David Fisher, and Kevin Whyte. Coarse differentiation of quasi-isometries II: Rigidity for Sol and lamplighter groups. *Ann. of Math. (2)*, 177(3):869–910, 2013.

Alex Eskin, David Fisher, and Kevin Whyte. Coarse differentiation of quasi-isometries I: Spaces not quasi-isometric to Cayley graphs. *Ann. of Math. (2)*, 176(1):221–260, 2012.

Jayadev Athreya, Alexander Bufetov, Alex Eskin, and Maryam Mirzakhani. Lattice point asymptotics and volume growth on Teichmüller space. *Duke Math. J.*, 161(6):1055–1111, 2012.

Alex Eskin, Maxim Kontsevich, and Anton Zorich. Lyapunov spectrum of square-tiled cyclic covers. *J. Mod. Dyn.*, 5(2):319–353, 2011.

Alex Eskin and Maryam Mirzakhani. Counting closed geodesics in moduli space. *J. Mod. Dyn.*, 5(1):71–105, 2011.

Alex Eskin and David Fisher. Quasi-isometric rigidity of solvable groups. In *Proceedings of the International Congress of Mathematicians. Volume III*, pages 1185–1208, New Delhi, 2010. Hindustan Book Agency.

Alex Eskin. Unipotent flows and applications. In *Homogeneous flows, moduli spaces and arithmetic*, volume 10 of *Clay Math. Proc.*, pages 71–129. Amer. Math. Soc., Providence, RI, 2010.

Alex Eskin, Andrei Okounkov, and Rahul Pandharipande. The theta characteristic of a branched covering. *Adv. Math.*, 217(3):873–888, 2008.

Alex Eskin, David Fisher, and Kevin Whyte. Quasi-isometries and rigidity of solvable groups. *Pure Appl. Math. Q.*, 3(4, part 1):927–947, 2007.

Yitwah Cheung and Alex Eskin. Unique ergodicity of translation flows. In *Partially hyperbolic dynamics, laminations, and Teichmüller flow*, volume 51 of *Fields Inst. Commun.*, pages 213–221. Amer. Math. Soc., Providence, RI, 2007.

Alex Eskin and Hee Oh. Representations of integers by an invariant polynomial and unipotent flows. *Duke Math. J.*, 135(3):481–506, 2006.

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Alex Eskin. Counting problems in moduli space. In *Handbook of dynamical systems. Vol. 1B*, pages 581–595. Elsevier B. V., Amsterdam, 2006.

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Alex Eskin, Shahar Mozes, and Hee Oh. On uniform exponential growth for linear groups. *Invent. Math.*, 160(1):1–30, 2005.

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Alex Eskin, Howard Masur, and Martin Schmoll. Billiards in rectangles with barriers. *Duke Math. J.*, 118(3):427–463, 2003.

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Preprints

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