

Zhiqiang Li

Assistant Professor

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WORKING EXPERIENCE

- 2019.6– **Assistant Professor**, Beijing International Center for Mathematical Research, Peking University; School of Mathematical Sciences, Peking University, Beijing, China.
- 2016.8–2019.6 **Milnor lecturer**, Institute for Mathematical Sciences, Stony Brook University, Stony Brook, New York, USA.
- 2016.2–2016.5 **Postdoctoral Fellow**, Institute for Computational and Experimental Research in Mathematics, Brown University, Providence, Rhode Island, USA.
- 2015.8–2016.1 **Milnor lecturer**, Institute for Mathematical Sciences, Stony Brook University, Stony Brook, New York, USA.

EDUCATION

- 2011.1–2015.7 **Ph.D. in Mathematics**, University of California – Los Angeles, Los Angeles, California, USA.
- Advisor: Professor Mario Bonk
- 2009.8–2010.12 **Graduate study in Mathematics**, University of Michigan Ann Arbor, Ann Arbor, Michigan, USA.
- Advisor: Professor Mario Bonk
- 2008.8–2009.7 **Master of Science in Mathematics**, University of Toronto, Toronto, Ontario, Canada.
- Advisor: Professor Ilia Binder
- 2007.1–2008.7 **Honours Bachelor of Science with High Distinction in Mathematics**, University of Toronto, Toronto, Ontario, Canada.
- Advisor: Professor Charles C. Pugh
- 2005.8–2006.12 **Undergraduate study in Mathematics**, Nanyang Technological University, Singapore.

HONOR AND AWARDS

- 2009 The Prince of Wales Prize in Mathematics, University of Toronto, Canada.

- 2009 Provost's Scholar of Trinity College, University of Toronto, Canada.
- 2008 University of Toronto Excellence Award, University of Toronto, Canada.
- 2008 On Dean's List in University of Toronto, Canada.
- 2006-2007 Nanyang President Research Scholarship from Nanyang Technological University, Singapore.
- 2006 On Dean's List in Nanyang Technological University, Singapore.

PUBLICATIONS AND PREPRINTS

- (with T. Zheng.) Prime orbit theorems for expanding Thurston maps. Preprint 2018, submitted for publication, (arXiv: 1804.08221). (171 pp.)
- *Ergodic theory of expanding Thurston maps*, volume 4 of *Atlantis Stud. Dyn. Syst.*, Atlantis Press (Springer), 2017. (XII, 182 pp.)
- Weak expansion properties and large deviation principles for expanding Thurston maps. *Adv. Math.* 285 (2015), 515–567.
- Equilibrium states for expanding Thurston maps. *Comm. Math. Phys.* 357 (2018), 811–872.
- Periodic points and the measure of maximal entropy of an expanding Thurston map. *Trans. Amer. Math. Soc.* 368 (2016), 8955–8999.
- (with B. Balamohan and S. Tanny.) A Combinatorial Interpretation for Certain Relatives of the Conolly Sequence. *J. Integer Seq.* 11 (2008), Article 08.2.1. (13 pp.)

SELECTED TALKS

- 2019 *Prime orbit theorems in complex dynamics*. Midwest Dynamical Systems Early Career Conference, Ohio State University, Columbus, Ohio, May 9, 2019.
- 2019 *Dynamical zeta functions and prime orbit theorems in complex dynamics*. Fudan–NYU Shanghai Conference on Ergodic Theory and Dynamical Systems, Fudan University, Shanghai, China, April 21, 2019.
- 2019 *Prime orbit theorems in complex dynamics and beyond*. Applied Analysis and Computation Seminar, University of Massachusetts – Amherst, Amherst, Massachusetts, March 26, 2019.
- 2019 *Prime orbit theorems in complex dynamics and beyond*. Applied Analysis and Computation Seminar, University of Massachusetts – Amherst, Amherst, Massachusetts, March 26, 2019.
- 2019 *Prime orbit theorems for expanding Thurston maps*. Group Actions and Dynamics Seminar, Yale University, New Haven, Connecticut, February 11, 2019.
- 2018 *Prime orbit theorems in complex dynamics and beyond*. Colloquium, Peking University, Beijing, China, December 14, 2018.
- 2018 *Dynamical zeta functions and prime orbit theorems in complex dynamics*. Dynamic Seminars, Tsinghua University, Beijing, China, December 7, 2018.

- 2018 *Prime orbit theorems for expanding Thurston maps*. Dynamic Seminars, Imperial College, London, United Kingdom, May 15, 2018.
- 2018 *Dynamical zeta functions and prime orbit theorems in complex dynamics*. Conference on Geometric Complexity of Julia Sets, the Mathematical Research and Conference Center, Będlewo, Poland, March, 2018.
- 2018 *Prime orbit theorems for expanding Thurston maps*. Dynamical Systems Seminar, Stony Brook University, Stony Brook, New York, February 23, 2018.
- 2017 *Prime orbit theorems and rational maps*. Workshop on Discrete Structures in Conformal Dynamics and Geometry, Indiana University Bloomington, Bloomington, Indiana, April 1, 2017.
- 2017 *Split Ruelle operators and dynamical zeta functions*. Dynamics Seminar, the Graduate Center, City University of New York, New York, New York, March 15, 2017.
- 2017 *Prime orbit theorems and rational maps*. Workshop on Fractals in Geometry and Dynamics, the Graduate Center, City University of New York, New York, New York, January 20, 2017.
- 2016 *Dynamical zeta functions and rational maps*. Probability Seminar, University of Rochester, Rochester, New York, December 2, 2016.
- 2016 *Prime orbit theorems and rational maps*. Complex Analysis and Dynamics Seminar, the Graduate Center, City University of New York, New York, New York, November 18, 2016.
- 2016 *Prime orbit theorems and rational maps*. Geometry-Analysis Seminars, Rice University, Houston, Texas, November 16, 2016.
- 2016 *Expanding Thurston maps and weak expansion properties*. Dynamics Seminar, University of Maryland, College Park, Maryland, April 21, 2016.
- 2016 *Ergodic theory of expanding Thurston maps*. Workshop on dynamical systems and related topics, University of Maryland, College Park, Maryland, April 17, 2016.
- 2015 *Weak expansion properties of expanding Thurston maps*. Second reunion workshop for Interactions Between Analysis and Geometry, Institute for Pure & Applied Mathematics, Lake Arrowhead, California, December 10, 2015.
- 2015 *Weak expansion properties of expanding Thurston maps*. Dynamics Seminar, Indiana University – Purdue University Indianapolis, Indianapolis, Indiana, December 3, 2015.
- 2015 *Ergodic theory of expanding Thurston maps*. Millican Colloquium, University of North Texas, Denton, Texas, November 9, 2015.
- 2015 *Ergodic theory of expanding Thurston maps*. Dynamical Systems Seminar, Stony Brook University, Stony Brook, New York, September 11, 2015.
- 2015 *Ergodic theory of expanding Thurston maps*. School and Conference in Dynamical Systems, International Centre for Theoretical Physics, Trieste, Italy, July 29, 2015.
- 2015 *Ergodic theory of expanding Thurston maps*. Rocky Mountain Dynamical Systems Conference, Provo, Utah, June 11, 2015.
- 2015 *Ergodic theory of expanding Thurston maps*. Analysis seminar, University of Cincinnati, Cincinnati, Ohio, May 13, 2015.

- 2015 *Weak expansion properties of expanding Thurston maps*. Dynamics and Complex Analysis Research Seminar, the Graduate Center, City University of New York, New York, New York, April 29, 2015.
- 2015 *Siegel's linearization theorem I & II*. Participating Analysis Seminar, University of California, Los Angeles, California, April 7 and April 14, 2015.
- 2015 *Ergodic theory of expanding Thurston maps*. AMS Sectional Meeting, University of Alabama in Huntsville, Huntsville, Alabama, March 28, 2015.
- 2015 *Ergodic theory of expanding Thurston maps*. Seminar in Mathematical Physics and Dynamical Systems, University of California, Riverside, California, February 5, 2015.
- 2014 *Ergodic theory of expanding Thurston maps*. Reunion workshop for Interactions Between Analysis and Geometry, Institute for Pure & Applied Mathematics, Lake Arrowhead, California, December 8, 2014.
- 2014 *Thermodynamical formalism and expanding Thurston maps*. Analysis seminar, University of Toronto, Toronto, Canada, November 24, 2014.
- 2014 *Thermodynamical formalism and expanding Thurston maps*. Dynamics seminar, University of Michigan – Ann Arbor, Ann Arbor, Michigan, November 10, 2014.
- 2014 *Thermodynamical formalism and weak expansion properties of expanding Thurston maps*. The Ahlfors-Bers Colloquium VI, Yale University, New Haven, Connecticut, October 24, 2014.
- 2014 *Distributional limits of Riemannian manifolds and graphs with sublinear genus growth*. Summer School on SLE, conformal welding, and random planar maps, Lake Arrowhead, California, September 25, 2014.
- 2014 *On a characterization theorem of rational maps by Dylan Thurston*. Workshop on conformal mating, Montana State University, Bozeman, MT, August 19, 2014.
- 2014 *Thermodynamical formalism for expanding Thurston maps*. Dynamics and Complex Analysis Research Seminar, the Graduate Center, City University of New York, New York, New York, May 23, 2014.
- 2014 *Fixed points and equilibrium states for expanding Thurston maps*. Sixth Iberoamerican Congress on Geometry, City University of New York, New York, New York, May 20, 2014.
- 2014 *Introduction to thermodynamical formalism and expanding Thurston maps I & II*. Participating Analysis Seminar, University of California – Los Angeles, Los Angeles, California, May 6 and May 13, 2014.
- 2014 *Thermodynamical formalism and expanding Thurston maps*. Séminaire Créteil-Orsay-Orléans-Lille (COOL), L'Institut Henri Poincaré, Paris, France, March 21, 2014.
- 2014 *Fixed points and equilibrium states for expanding Thurston maps*. Workshop on Holomorphic and Symbolic Dynamics, L'Institut de Mathématiques de Toulouse, Toulouse, France, January 21, 2014.
- 2013 *Topological and measure-theoretic entropy in dynamics, I & II*. Participating Analysis Seminar, University of California – Los Angeles, Los Angeles, California, February 12 and February 19, 2013.

- 2012 *On Dessins and Belyi functions*. Workshop on Carpets and CLE, University of Washington, Seattle, Washington, August 7, 2012.
- 2012 *The Patterson-Sullivan measure I & II*. Participating Analysis Seminar, University of California – Los Angeles, Los Angeles, California, January 10 and January 17, 2012.

TEACHING EXPERIENCE

- 2015-present **Milnor Lecturer**, *Department of Mathematics, Stony Brook University*.
- Taught and coordinated courses in Calculus
- 2011-2015 **Graduate Teaching Assistant**, *Department of Mathematics, University of California at Los Angeles*.
- Taught discussion sessions for Pre-Calculus, Calculus, and Probability, Real Analysis
- 2009-2010 **Graduate Teaching Assistant**, *Department of Mathematics, University of Michigan at Ann Arbor*.
- Taught discussion sessions for Pre-Calculus, Calculus
- 2008-2009 **Graduate Teaching Assistant**, *Department of Mathematics, University of Toronto*.
- Taught discussion sessions for Calculus
- 2008 **Undergraduate Teaching Assistant**, *Department of Mathematics, University of Toronto*.
- Taught discussion sessions for Calculus

LANGUAGES

Mandarin: Native

English: Fluent

French: Elementary, able to read math literature

Programming Skills

Familiar with C++, Pascal, Delphi programming languages.