

Jonguk Yang

Personal Information

Date of Birth: July 12, 1989

Email: jongukyang@gmail.com

Phone: 1 (631) 428-6308

Personal Website: <http://www.math.stonybrook.edu/~jongukyang/>

Employment

Postdoc, University of Zurich, 2022 - Present.

Milnor Lecturer, Institute for Mathematical Sciences at Stony Brook University, 2017 - 2022.

On leave to University of Michigan, 2018 - 2019.

Assistant Professor, University of Michigan, 2018 - 2019.

Education

Ph.D. Mathematics, University of Toronto, August 2017.

Advisor: Michael Yampolsky.

My thesis was awarded the departmental prize for excellence in research by a PhD graduate.

M.A. Mathematics, University of Toronto, June 2012.

B.S. Mathematics, University of Toronto, 2007 - 2011.

Honors and Awards

Malcolm Slingsby Robertson Prize in Mathematics, 2017.

Queen Elizabeth II/Lloyd George Elliott Graduate Scholarship in Science and Technology, 2016-2017.

Ontario Graduate Scholarship, 2014-2015 and 2015-2016.

NSERC Canadian Graduate Scholarship–Masters, 2012-2013.

The Coxeter Scholarship in Mathematics, 2010.

The Harry Boxen Memorial Scholarship in Mathematics, 2010.

NSERC Undergraduate Student Research Award, 2009 and 2010.

Publications and Preprints

Mating a Siegel Disk with the Basilica.

Conformal Geometry and Dynamics. 19 (2015), 258-297.

Renormalization in the Golden-Mean Semi-Siegel Hénon Family: Universality and Non-Rigidity.

Ergodic Theory and Dynamical Systems 83 (2018), 1-45.

(With M. Yampolsky) *The Boundaries of Golden-Mean Siegel Disks in the Complex Quadratic Hénon Family Are Not Smooth.*

New Trends in One-Dimensional Dynamics. 285 (2019).

Renormalization in the Golden-Mean Semi-Siegel Hénon Family: Non-quasisymmetry.

Arnold Math J. (2020).

(with M. Yampolsky) *Structural Instability of the Semi-Siegel Hénon Maps.*

Advances in Mathematics. 389 (2021), 107900.

Local Connectivity of Polynomial Julia sets at Bounded Type Siegel Boundaries.

Submitted for publication. arXiv:2010.14003.

(with C. Davis, J. Powell, R. Winarski) *Elastic Graphs for Matings with Quadratic Polynomials in the Main Molecule.*

Preprint (2020). arXiv:2010.11382.

Select Presentations

Renormalization of Dynamical Systems, 2022.

Small Scale Dynamics in Fluid Motion.

Polynomials with Bounded Type Siegel Disks, 2020.

On the Geometric Complexity of Julia Sets - II.

Recurrence of One-Sided Sequences under Shift, 2019.

Dynamics, Equations and Applications.

Structural Instability in the Golden-Mean Semi-Siegel Hénon Family, 2019.

Analytic Low-Dimensional Dynamics: a celebration of Misha Lyubich's 60th birthday.

Renormalization in the Golden-Mean Semi-Siegel Hénon Family: Universality and Non-Rigidity, 2017.

Workshop on New Frontiers in Complex Dynamics: From One to Several Variables.

Languages

English: Native language.

Korean: Mother tongue.

Citizenship

Canadian.