Jonguk Yang

Personal Information

Date of Birth: July 12, 1989

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Employment

2022 - Present: Postdoc, University of Zurich.
In the research group of Corinna Ulcigrai

2017 - 2022: Milnor Lecturer, Institute for Mathematical Sciences at Stony Brook University.
On leave, 2018 - 2019.

2018 - 2019: Visiting postdoc, University of Michigan.

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

Infinitely Renormalizable Critical Points in Higher Dimensions, 2022.
On the Geometric Complexity of Julia Sets - IV.

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.