

Chenxi Wu

email: wuchenxi2013@gmail.com

<https://wuchenxi.github.io>

https://arxiv.org/a/wu_c_3.html

Education and Employment

- Assistant Professor at UW Madison, Sept 2020-
- Hill Assistant Professor at Rutgers University-New Brunswick, Sept 2017-May 2020
- Postdoc at MPIM, Nov 2016-July 2017
- Member at MSRI, August 2016-Oct 2016
- Ph. D in Mathematics, Cornell University, August 2016, Advisor: John Smillie
- B. Sc. in Mathematics, Peking University, July 2010

Publications

- Chenxi Wu. The relative cohomology of abelian covers of the flat pillow-case. *Journal of Modern Dynamics*, 2015. doi:10.3934/jmd.2015.9.123
- Chenxi Wu. Delone property of the holonomy vectors of translation surfaces. *Israel Journal of Mathematics*, 2016. doi: 10.1007/s11856-016-1357-y
- Hyungryul Baik, Ahmad Rafiqi and Chenxi Wu. Constructing pseudo-Anosov maps with given dilatations. *Geometriae Dedicata*, 2016. doi: 10.1007/s10711-015-0089-1
- Chenxi Wu. Lattice surfaces and smallest triangle. *Geometriae Dedicata*, 2017. doi: 10.1007/s10711-016-0191-z
- Lucien Clavier, Anja Randecker, Chenxi Wu. Rotational component spaces for infinite-type translation surfaces. *Geometriae Dedicata*, 2019
- Hyungryul Baik, Ahmad Rafiqi and Chenxi Wu. Is a typical bi-Perron number a pseudo-Anosov dilatation? *Ergodic Theory and Dynamical System*, 2019
- Farbod Shokrieh and Chenxi Wu. Canonical measures on metric graphs and a Kazhdan's theorem, *Invent. Math.* 2019

- Hyungryul Baik, Farbod Shokrieh and Chenxi Wu. Limits of canonical forms on towers of Riemann surfaces, Crelle, 2019
- Hyungryul Baik and Chenxi Wu. An algorithm to compute Teichmüller polynomial from matrices, Geometriae Dedicata, 2019
- Hyungryul Baik, Hyunshik Shin, Chenxi Wu. An upper bound on the asymptotic translation lengths on the curve graph and fibered faces, Indiana University Math Journal, 2021
- Harrison Bray, Diana Davis, Kathryn Lindsey, Chenxi Wu. The shape of Thurston’s Master Teapot, Advances in Mathematics, 2021
- Hyungryul Baik, Sebastian Hensel, Chenxi Wu. Foliation from left orders, J. Korean Math. Soc. 2021
- Hyungryul Baik, Eiko Kin, Hyunshik Shin, Chenxi Wu. Asymptotic translation length and normal generation of for the fibered cone, Algebraic and Geometric Topology, 2021
- Kathryn Lindsey, Chenxi Wu. A Characterization of Thurston’s Master Teapot, Ergodic Theory and Dynamical Systems, 2022

Preprints

- Hyungryul Baik, Dongryul M. Kim, Chenxi Wu, Minimal asymptotic translation lengths on curve complexes and homology of mapping tori, arXiv:2107.09018
- Hyungryul Baik, Dongryul M. Kim, Chenxi Wu, On the asymptotic translation lengths on the sphere complexes and the generalized fibered cone, arXiv:2011.08034
- Kathryn Lindsey, Giulio Tiozzo, Chenxi Wu, Master Teapots and Entropy Algorithms for the Mandelbrot Set, arXiv:2112.14590
- Hyungryul Baik, Dongryul M. Kim, Chenxi Wu, Reducible normal generators for mapping class groups are abundant, arXiv:2112.13726

Grants

Simons Collaboration Grant, 2021-2026

Teaching and Outreach

Spring 2022: Modern Algebra

Fall 2021: Introduction to Dynamics

Spring 2021: Differential Geometry

Fall 2020: Numerical Analysis

Spring 2020: Statistics

Fall 2019: Elementary Linear algebra

Spring 2019: Introduction to Mathematical reasoning

Fall 2018: Introduction to Applied Mathematics

Spring 2018: Instructor for linear optimization

Fall 2017: Instructor for Elementary linear algebra and Introductory PDE

Spring 2015: Calculus I

Madison Experimental Math Lab, Spring 2022, Fall 2022

Madison Math Circle, May 2022

Math Explorer's Club at Cornell, March 2016

Math Club at Ithaca High School, Fall 2011