

# Xiaoping Zhu

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## EDUCATION

**Rutgers University** Sep 2016 - expected May 2022  
Ph.D. candidate in Mathematics

- Advisor: Feng Luo
- Thesis topic: Convergence of discrete uniformization factors on closed surfaces.

**Beijing Normal University** Sep 2012 - June 2016  
B.S. in Mathematics  
Outstanding graduation students in University.

## RESEARCH INTERESTS

Discrete differential geometry, discrete computational geometry, and related applications in computer graphics.

## PUBLICATIONS

1. The Convergence of Discrete Uniformizations for Closed Surfaces, with Tianqi Wu, submitted
2. The deformation space of geodesic triangulations and generalized Tutte's embedding theorem, with Yanwen Luo and Tianqi Wu, submitted.
3. The deformation space of geodesic triangulations of flat tori, with Yanwen Luo and Tianqi Wu, submitted.
4. The convergence of discrete uniformization factors on sphere, with Yanwen Luo and Tianqi Wu, in preparation.

## HONORS AND AWARDS

- Academic Excellence reward, Department of Mathematics, Rutgers University, New Brunswick, 2017.

## TALKS

- *Geometry/Topology Seminar*, Rutgers University - New Brunswick, Piscataway, NJ, USA, Feb 2020
- *FRG Workshop on Geometric Methods for Analyzing Discrete Shapes*, CMSA, Harvard University, Cambridge, MA, USA, May. 2021
- *2021 Graduate Student Topology and Geometry Conference*, online, April 2021.

## EVENTS ATTENDANCE

- *Workshop on Discrete and Computational geometry* Jul, 2019  
Capital Normal University, Beijing, China
- *PCMI 2019 Graduate Summer School: Quantum Field Theory and Manifold Invariants* June 30 - July 20 2019  
Park City, Utah, USA.
- *Circle Packings and Geometric Rigidity* July 6-10, 2020, virtual.

- *Algorithms in Complex Dynamics and Mapping Class Groups* Nov 2-3, 2019  
Icerm, Rhode Island, USA.
- *FRG Workshop on Discrete Shapes* Sep 20-22 2019  
University of California Davis, CA, USA

## TEACHING EXPERIENCES

### Instructor

- MATH 251: Multivariable Calculus Summer 2021

### Teaching Assistant

- MATH 477: Linear optimization, Fall 2020
- MATH 251: Multivariable Calculus, Spring 2020
- MATH 421: Ordinary Differential Equations for Physics and Engineering, Fall 2019.
- MATH 244: Differential Equations for Physics and Engineering, Spring 2018.
- MATH 151: Calculus I, Fall 2018.
- MATH 250: Linear Algebra, Fall 2017.

## PROFESSIONAL AFFILIATION

- American Mathematical Society 2016 – present

## MISCELLANY

- **Computer skills:** L<sup>A</sup>T<sub>E</sub>X, Matlab, Maple, Python, C++.
- **Languages:** Mandarin (Native), English (Fluent)