

Tina Torkaman

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Education

Sep 2017 – Present	Harvard University , Cambridge, MA Ph.D. in Mathematics Advisor: Curtis McMullen
Sep 2013 – 2017	Sharif University of Technology , Tehran, Iran B.SC. in Mathematics

Research Interest

Hyperbolic surfaces, Teichmüller theory, ergodic theory, dynamics and geometry of moduli space

Leadership and Teaching Experience

Teaching Fellow at Harvard University

- *Math 21a Multivariable Calculus, Spring 2021 (entirely remotely)*
- *Math 21a Multivariable Calculus, Fall 2019*

Teaching Assistant at Harvard University

- *Math 21a Multivariable Calculus, Spring 2019*

Mentor

- Direct Reading Program on Ergodic Theory, Harvard, Fall 2020 (entirely remotely)

Teaching Assistant at Sharif University of Technology

- *Graph Theory, Fall 2015*
- *Linear Algebra, Spring 2015*

Teaching Olympiad Classes

- *Preparing students for participating in IMO (International math Olympiad) and IOI (International Olympiad in Informatics), 2013-2015*

Honors and Awards

Raphaël and Daniel Salem Fellowship, 2019-2020

Harvard Bok Center Certificate of Distinction in Teaching, Fall 2019

Mirzakhani Scholarship, Iranian summit at Harvard, Spring 2019

Gold Medal in IMC (International Mathematical Competiton), Bulgaria, 2015

Gold Medal in IMS (Iranian Mathematical Society Competition), 2015

Silver Medal in IMO (International Mathematical Olympiad), Colombia, 2013

Gold Medal in National Mathematical Olympiad, 2012

Bronze Medal in National Olympiad in Informatics, 2011.

Publications

- **Train Track, Entropy, and the halo of a measure lamination** (with Yongquan)
submitted, 2021, arXiv:2105.00370

Talks and Presentations

Informal Geometry and Dynamic Seminar

Level sets of length function in moduli space, Harvard, Fall 2019

Trivial Notion Seminar

Automorphisms of Riemann Surfaces, Harvard, Fall 2018

Undergraduate Research and Experiential Learning

Critical Exponent of Graphs, Poster Presentation, Delaware, United State, Summer 2016

Conference on Algebraic Combinatorics and Graph Theory

Tree Decomposition of Graphs, Iran, Fall 2015.

Programs Attended

ST Yau 70th Birthday-Conference on Differential Geometry

Calabi-Yau Theory and General Relativity, Harvard, Spring 2019

Houston Summer School on Dynamical Systems

University of Houston, Summer 2019

Graduate School on Geometry of Teichmüller Spaces

Simons Center, Spring 2019

Summer School on Teichmüller Dynamics, Mapping Class Groups and Applications

Organized by Fourier Institute, Grenoble, France, Summer 2018

Dynamical, Arithmetical and Algebraic Aspects of Tilings

Oleron, France, Spring 2016

Advanced School on Geometric Group Theory and Low-Dimensional Topology

Organized by ICTP (International Center for Theoretical Physics) in Trieste, Italy, Spring 2016

Summer School on Tilings and Tessellations

Organized by CIMPA (International Centre for Pure and Applied Mathematics), Iran, Summer 2015