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, 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

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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 Competition), 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

2. Baggins, B. & **Baggins, F.** There and Back Again. And What Happened After. Adventures of Five Hobbits. The Tale of the Great Ring. *Annals* (3001).

3001 | 1. **Baggins, F.** & Gamgee, S. The Downfall of the Lord of the Rings and the Return of the King. *Annals* (3011).

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 Teichmuller 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 (Internationl Center for Theoritical Phisycs) in Trieste, Italy, Spring 2016

Summer School on Tilings and Tesselations

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