# Yi Tian

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#### EDUCATION\_

10/2024 - Present University of Cambridge

PhD in Pure Mathematics and Mathematical Statistics

Advisor: Jason Miller

10/2022 - 08/2024 Universität Bonn

MSc in Mathematics Advisor: Eveliina Peltola

09/2018 - 07/2022 Peking University

BSc in Mathematics and Applied Mathematics

Advisor: Zhiyu Tian

#### PAPERS\_\_

- Existence and uniqueness of the conformally invariant geodesic metric on conformal loop ensembles of central charge one (with E. Kammerer, K. Kavvadias, J. Miller, and W. Werner). In preparation.
- Existence and uniqueness of the Brownian motion on simple conformal loop ensemble carpets (with J. Miller). In preparation.
- Existence and uniqueness of the conformally covariant geodesic metric on simple conformal loop ensemble carpets (with J. Miller). arXiv:2511.16208

### TALKS\_\_\_

CIRM Aug 2025 The conformally covariant geodesic metric on simple conformal loop ensembles

Combinatorial and hyperbolic random planar geometry

Bonn Jul 2025 The conformally covariant geodesic metric on simple conformal loop ensembles

Probabilistic methods in quantum field theory

### TEACHING\_

## University of Cambridge

Michaelmas 2025 Teaching Assistant of Random Discrete Structures

Universität Bonn

WiSe 2023/2024 Teaching Assistant of Markov Processes

# AWARDS\_

2024 - 2027 Cambridge International Scholarship

Cambridge Trust

2022 Huaixin Scholarship

BICMR, Peking University

2017 Gold Medal of the 33rd Chinese Mathematical Olympiad