Yuriy Tumarkin

Curriculum Vitae

Institut für Mathematik
Wintherturerstrasse 190
8057 Zürich, Switzerland
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2022 – present   **PhD Student**, *University of Zurich*,
                 Supervisor: Corinna Ulcigrai.
Research interests: Teichmüller dynamics, translation surfaces, infinite genus surfaces.

Education

2021–2022   **MMath**, *Part III of the Mathematical Tripos, University of Cambridge*,
            Distinction, 86%.

2018–2021   **Mathematics B.A.**, *Trinity College, University of Cambridge*,
            Third year: First Class Honours, 78%.

Publications

[2]   (With Misha Schmalian and Yuri B. Suris). "How one can repair non-integrable Kahan discretizations. II. A planar system with invariant curves of degree 6." *Mathematical Physics, Analysis and Geometry* 24 (2021). arXiv: 2106.14301.

Submitted for publication

[1]   *Ergodic measures for periodic type $\mathbb{Z}^m$-skew-products over Interval Exchange Transformations.* 2023. arXiv: 2312.13165.

Talks

Apr 2024   **Zurich Graduate Colloquium**, *What is ... a translation surface?*

Oct 2023   **Zurich Dynamics Talks**, *Invariant measures for periodic type skew-products over IETs*

Dec 2018   **Talk at Durham Johnston School mathematical society**, *Cutting Sequences and Beatty's Theorem*

Teaching and supervision

Autumn 2024   **Student seminar instructor**, *Combinatorics and Geometry*

Spring 2024   **Teaching assistant**, *Analysis II*

Autumn 2023   **Student seminar instructor**, *Hyperbolic Geometry*

Spring 2023   **Teaching assistant**, *Elements of Geometry*

Autumn 2022   **Teaching assistant**, *Elements of Topology*

Supervision

Feb 2024 – present   **Master thesis co-supervisor**, *Tiling Billiards*, Sabrina Robbiani

Outreach

Mar 2023 – present   **Slow Chaos Exhibition at Science Pavilion UZH**, *Member of team giving regular public tours and workshops for school classes about billiards and slow chaos.*

Oct – Nov 2019   **STIMULUS**, *I taught six year 5 students (10 years old) introductory combinatorics*, Cambridge, UK.

July 2019   **Team Guide at IMO**, *Bath, UK*

Organisation roles

July 2024 – present	**Co-organiser of the Geometry Graduate Colloquium**, *Zurich.*
Apr 2020 – Mar 2021	**External secretary of Cambridge University Mathematical Society**, *Responsible for organising weekly talks by invited speakers*
2016–2018	**Organiser of school mathematical society**, *Compiled problem sheets (available* here*) and led weekly sessions, Durham Johnston School*

Awards and prizes

2021	**Rouse Ball Mathematics Prize**, *For the essay "Groups acting on trees"*
2021–22	**Trinity College Senior Scholarship**
2019–20	**Trinity College Junior Scholarship**
2019, 2021, 2022	**Trinity College Examination Prizes**

Conferences and schools attended

Jul 2024	Hengstberger Symposium: Geometry and dynamics of surfaces beyond finite-type, Heielberg, Germany
Jun 2024	New Frontiers in Parabolic Dynamics and Renormalization, Bologna, Italy
Jun 2024	British Mathematical Colloquium, Manchester, UK
Mar 2024	School on flat surfaces and interactions, Le Teich, France
Dec 2023	Renormalization and Visualization in Geometry, Dynamics and number theory, CIRM, Luminy, France
Oct 2023	Conference on Dynamics and Finance: from KAM Tori to ETFs, Trieste, Italy
Jul 2023	School on Renormalization and Visualization for packing, Billiards and Surfaces, CIRM, Luminy, France
Jul 2023	IMJ-PRG Summer school 2023: Microlocal and probabilistic methods in geometry and dynamics, Paris, France
Jun 2023	Zurich Dynamics Conference, Zurich, Switzerland
Jun 2023	Zurich Dynamics School, Zurich, Switzerland
May 2023	Groups and Dynamics in Geometry, Ascona, Switzerland
May 2023	Master Class: Low dimensional dynamical systems, Stockholm, Sweden
Sep 2022	Combinatorics, Dynamics and Geometry on Moduli Spaces, CIRM, Luminy, France
Sep 2022	Mini-workshop dynamics and Groups, Zurich, Switzerland
2017	Modern Mathematics International Summer School for Students, Bremen, Germany
2016	Contemporary Mathematics Summer School, Dubna, Russia

Skills

Languages	English, Russian (Native), German (approx C1), French (approx C1).
Programming and software	Sage, Python, LaTeX, Geogebra

References

Corinna Ulcigrai (University of Zurich)	corinna.ulcigrai@math.uzh.ch.