Merlin Incerti–Medici | CV

- Date of birth: May 19th, 1991
- ORCID ID: 0000-0001-8404-9036
- Citizenship: Switzerland
- Professional Adress: Oskar-Morgenstern-Platz 1
  1090 Wien

Education

09/2016 – 09/2020 **PhD qualification** Universität Zürich

- Supervisor: Prof. Viktor Schroeder
- Title: Methods of Asymptotic Geometry in CAT(0) spaces and beyond.

09/2014 – 08/2015 **Qualification year at Max Planck Institute in Bonn** MPIM Bonn

09/2009 – 06/2014 **BSc and MSc in mathematics** ETH Zürich

Working experience

04/2023 – present **PostDoc** Universität Wien

07/2022 – 03/2023 **PostDoc** Karlsruhe Institute for Technology

01/2021 – 06/2022 **PostDoc** IHES, Paris

10/2020 – 12/2020 **Scientific Assistant** ETH Zürich

09/2016 – 09/2020 **PhD student** Universität Zürich

08/2018 – 10/2020 **Outreach-Project: Humboldt der Weltvernetzer** joint with Life Science Communication AG

- Organisation of the mobile exhibition Humboldt der Weltvernetzer in honour of the 250th anniversary of Alexander von Humboldt. The exhibition presents Humboldts life, work, and relevance for both modern research and modern perception of the world. It specifically aims at reaching parts of the population that have limited access to scientific topics for geographic or socio-economic reasons.
- My part of the work included: Initiation & conceptualisation; recruitment of Life Science Communication AG; fund raising; research and writing; giving tours to school classes.

09/2010 – 06/2013, 09/2016 – 08/2018 **Teaching Assistant** ETH Zürich & Universität Zürich

- 09/2010 – 06/2013: Teaching exercise classes and correcting homework at ETH
- 09/2016 – 08/2018: Teaching exercise classes and correcting homework at Universität Zürich

Institutional Responsibilities

04/2023 – present **Reviewer for zbMath** zbMath

08/2018 – 03/2020 **Co-President of the association for junior scientists at UZH (VAUZ)** Universität Zürich

- Member of the (two-person) presidium of the association for junior scientists at UZH. The associations purpose is to represent junior scientists of UZH in university politics.
- The work included: Leading the association, organisational work, decision-making & policy writing; negotiating with the board and executive board of the university; representing junior scientists in the University Board and the Extended Executive Board (EUL) of UZH; creating organisational structures within the association to improve its inner workings; coordinating representatives of junior scientists & mediating between diverging interests; managing the university fund for junior researchers, known as 'Tagungsfond'.

Teaching Activities

10/2022 – 03/2023 **Lecture coordinator** KIT

- Tasks: Teaching exercise classes, writing exercise sheets and sample solutions, writing exam and sample solutions, managing the course-website and the associated forum.
- Courses: Elementare Geometrie

09/2016 – 06/2018 **Teaching assistant** Universität Zürich

- Tasks include: Teaching exercise classes, correcting homework and exams, writing exercise and exam questions, assist students individually in 'Student hours'
- Courses: Linear Algebra for Natural Scientists (fall 2016), Analysis II (spring 2017), Linear Algebra I (fall 2017), Stochastics for Natural Scientists (spring 2018)

09/2010 – 06/2013 **Teaching assistant** ETH Zürich

- Tasks: Teaching exercise classes, correcting homework
- Courses: Linear Algebra I & II for Engineers (fall 2010 and spring 2011), Complex Analysis (fall 2011 and 2012), Topology (spring 2012 and 2013)

Publications and preprints

1. Corey Bregman and Merlin Incerti-Medici. *On a generalization of Cannon's conjecture for cubulated hyperbolic groups.* ArXiv:2406.08779, 2024.
2. Tobias Hartnick and Merlin Incerti-Medici. *Automorphism groups of cocompact CAT(0) cube complexes and simplicity.* ArXiv:2312.03336, 2023.
3. Tobias Hartnick and Merlin Incerti-Medici. *Automorphisms of self-similar trees.* ArXiv:2312.03334, 2023.
4. Carolyn Abbott and Merlin Incerti-Medici. *Hyperbolic projections and topological invariance of sublinearly Morse boundaries.* ArXiv:2212.09539, 2022.
5. Corey Bregman and Merlin Incerti-Medici. The normal growth exponent of a codimension one hypersurface of a negatively curved manifold. *ArXiv:2109.06149*, 2021.
6. Corey Bregman and Merlin Incerti-Medici. Shrinking simplicial subdivisions, strong barycenters and limit sets of codimension one quasi-convex subgroups. *ArXiv:2109.05302*, 2021.
7. Merlin Incerti-Medici and Abdul Zalloum. *Sublinearly Morse boundaries from the viewpoint of combinatorics.* Forum Mathematicum, DOI:10.1515/forum-2022-0269, 2023

8. Merlin Incerti-Medici. *Circumcenter extension maps for non-positively curved spaces.* Geom. Dedicata 218, No. 2, Paper No. 34, DOI:10.1007/s10711-023-00881-0, 2024.

9. Merlin Incerti-Medici. *Comparing topologies on the Morse boundary and quasi-isometry invariance.* Geometriae Dedicata, 212(1):153-176, DOI:10.1007/s10711-020-00553-3, 2020

10. Jonas Beyrer, Elia Fioravanti, and Merlin Incerti-Medici. *CAT(0) cube complexes are determined by their boundary cross ratio.* Groups, Geometry, and Dynamics, 15(1):313-333, DOI:10.4171/ggd/599, 2021.

11. Merlin Incerti-Medici. *The Nagata- and Hausdorff-dimension of intrinsic Möbius space.* ArXiv:1709.03254, 2017.

12. Merlin Incerti-Medici. *Möbius structures, quasi-metrics, and completeness.* ArXiv:1706.10166, 2017 (accepted in Algebraic & Geometric Topology).

Talks

- 18/06/2024 — *Geometry and Analysis on Groups Research Seminar* at Universität Wien
- 10/04/2024 — *Geometric group theory seminar* at McGill university
- 02/04/2024 — *Geometric group theory seminar* at Tufts university
- 21/03/2024 — *Homological and topological methods in group theory 2024* at Universität Bielefeld
- 11/03/2024 — *Séminaires liés à la théorie des groupes* at UCLouvain
- 25/01/2024 — *Symmetry in Newcastle* at University Newcastle, Australia
- 25/04/2023 — *Geometry and Analysis on Groups Research Seminar* at Universität Wien
- 24/11/2022 — *Seminar der Arbeitsgruppe Gruppen, Geometry und Dynamik* at KIT, Karlsruhe
- 17/11/2022 — *Fudan Topology Seminar*
- 06/09/2022 — *Modern advances in ggt* at University of Manchester
- 21/07/2022 — *AG Seminar Geometric Group Theory* at KIT, Karlsruhe
- 28/04/2022 — *Dynamics Seminar* at Université Paris-Saclay
- 17/11/2021 — Invited speaker at the *Young Researchers meeting of GDR Platon*
- 27/09/2021 — *Seminar on Groups and operator algebras* at Université Paris-Saclay
- 07/10/2020 — *Geometry Seminar* at ETH Zürich
- 16/04/2020 — *Topology and Geometric Group Theory seminar* at Ohio State University
- 18/03/2020 — *Geometric Group Theory seminar* at McGill University
- 06/03/2020 — *Dynamics, Geometry & Groups Seminar* at Queen's University
- 11/02/2020 — *Geometry and Topology seminar* at CUNY
- 08/10/2019 — *Zurich Graduate Colloquium*, Zürich
- 13/12/2018 — *Geometry Graduate Colloquium* at ETH Zürich
- 29/03/2018 — *Geometry Graduate Colloquium* at ETH Zürich

Memberships in Panels, Boards etc.

- 01/2019 – 01/2020 — Representative of junior scientists in the University Board of UZH
- 03/2018 – 01/2020 — Deputy representative of junior scientists in the Extended Executive Board of UZH
- 03/2017 – 05/2018 — Representative of junior scientists in the equality commission of UZH

Prizes, Awards and Fellowships

- 04/2023 – 03/2026 — ESPRIT Grant 10.55776/ESP124 from FWF in Austria
- 01/2021 – 06/2022 — Early PostDoc.Mobility Grant from SNF; Grant 194996
- 09/2012 – 02/2014 — Excellence Scholarship & Opportunity Program (ESOP) from ETH Zürich
- 01/2020 – 07/2020 — Mobility grant in Projects from SNF; part of Grant 175567

Personal Skills

Spoken languages

Native: German
Proficient: English
Basic: French

Software skills

Basic: MATLAB, C++, Mathematica
Proficient: LaTeX

Other interests

Classical Music
Science Communication
Neuroscience
Social Dances
Philosophy and History of Science
Political History