

MERLIN INCERTI-MEDICI | CV

» Date of birth:	May 19th, 1991	» ORCID ID:	0000-0001-8404-9036
» Citizenship:	Switzerland	» Professional Address:	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,	Teaching Assistant	ETH Zürich &
09/2016 – 08/2018		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

III Institutional Responsibilities

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 association's 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'.

III Teaching Activities

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

- ▶ Tasks include: Teaching exercise classes, writing exercise sheets and sample solutions, writing exam and sample solutions, managing the course-website and the associated forum.
- ▶ 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'
- ▶ 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 include: Teaching exercise classes, correcting homework
- ▶ Linear Algebra I & II for Engineers (fall 2010 and spring 2011), Complex Analysis (fall 2011 and 2012), Topology (spring 2012 and 2013)

III Publications and preprints

1. Carolyn Abbott and Merlin Incerti-Medici. *Hyperbolic projections and topological invariance of sublinearly Morse boundaries*. *ArXiv:2212.09539*, 2022.
2. Corey Bregman and Merlin Incerti-Medici. The normal growth exponent of a codimension one hypersurface of a negatively curved manifold. *ArXiv:2109.06149*, 2021.
3. Corey Bregman and Merlin Incerti-Medici. Shrinking simplicial subdivisions, strong barycenters and limit sets of codimension one quasi-convex subgroups. *ArXiv:2109.05302*, 2021.
4. Merlin Incerti-Medici and Abdul Zalloum. Sublinearly Morse boundaries from the viewpoint of combinatorics. *ArXiv:2101.01037*, 2021.
5. Jonas Beyrer, Elia Fioravanti, and Merlin Incerti-Medici. $\text{Cat}(0)$ cube complexes are determined by their boundary cross ratio. *Groups, Geometry, and Dynamics*, 15(1):313-333, 2021. DOI:10.4171/ggd/599
6. Merlin Incerti-Medici. Circumcenter extension maps for non-positively curved spaces. *ArXiv:2001.11472*, 2020.
7. Merlin Incerti-Medici. Comparing topologies on the Morse boundary and quasi-isometry invariance. *Geometriae Dedicata*, 212(1):153-176, 2020. DOI:10.1007/s10711-020-00553-3
8. Merlin Incerti-Medici. The Nagata- and Hausdorff-dimension of intrinsic Möbius space. *ArXiv:1709.03254*, 2017.

9. Merlin Incerti-Medici. *Möbius structures, quasi-metrics, and completeness*. ArXiv:1706.10166, 2017.

Talks

- ▶ 24/11/2022 **Extensions of cross ratio-preserving maps to $CAT(0)$ cube complexes;**
Seminar der Arbeitsgruppe Gruppen, Geometry und Dynamik
- ▶ 17/11/2022 **Hyperbolic projections and topological invariance of Morse boundaries;**
Fudan Topology Seminar
- ▶ 06/09/2022 **Hyperbolic projections and topological invariance on Morse boundaries;**
Modern advances in ggt at University of Manchester
- ▶ 21/07/2022 **Hyperbolic projections and topology of Morse boundaries;**
AG Seminar Geometric Group Theory at Karlsruher Institut für Technologie
- ▶ 28/04/2022 **On the topology of limit sets of quasi-convex subgroups;**
Topology & Dynamics Seminar at Université Paris-Saclay
- ▶ 17/11/2021 **Detecting deformations of hyperbolic manifolds and normal growth;**
Invited speaker at the Young Researchers meeting of GDR Platon
- ▶ 27/09/2021 **Detecting deformations of hyperbolic manifolds and normal growth;**
Seminar on Groups and operator algebras at Université Paris-Saclay
- ▶ 07/10/2020 **Circumcenter extension maps for Hadamard manifolds;**
Geometry Seminar at ETH Zürich
- ▶ 16/04/2020 **Circumcenter extension maps for Hadamard manifolds;**
Topology and Geometric Group Theory seminar at Ohio State University
- ▶ 18/03/2020 **Topologies and metrics on the Morse boundary;**
Geometric Group Theory seminar at McGill University
- ▶ 06/03/2020 **Circumcenter extension maps for Hadamard manifolds;**
Dynamics, Geometry & Groups Seminar at Queen's University
- ▶ 11/02/2020 **Circumcenter extensions of cross-ratio preserving maps on Hadamard manifolds;**
Geometry and Topology seminar at CUNY
- ▶ 08/10/2019 **What are... points at infinity?;**
Zurich Graduate Colloquium, Zürich
- ▶ 13/12/2018 **A short introduction to $CAT(0)$ cube complexes;**
Geometry Graduate Colloquium at ETH Zürich
- ▶ 29/03/2018 **On the hyperbolic behaviour of Morse boundaries;**
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 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
Intermediate: French

Software skills

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

Other interests

Classical Music
Science Communication
Neuroscience

Social Dances
Philosophy and History of Science
Psychology & Behaviour