# Merlin Incerti-Medici CV

**▶** Date of birth: May 19th, 1991 **▶** ORCID ID: 0000-0001-8404-9036

 ▶ Citizenship:
 Switzerland

 ▶ Professional Adress:
 35 Route de Chartres

 □ Professional Adress:
 10 Professional Adress:

FR-91440 Bur-sur-Yvette

#### **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

01/2021 - 06/2022	PostDoc	IHES
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

# **Institutional Responsibilities**

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

- ▶ 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**

#### 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)

# **Publications and preprints**

- 1. Corey Bregman and Merlin Incerti-Medici. The normal growth exponent of a codimension one hypersurface of a negatively curved manifold. *ArXiv:2109.06149*, 2021.
- 2. Corey Bregman and Merlin Incerti-Medici. Shrinking simplicial subdivisions, strong barycenters and limit sets of codimension one quasi-convex subgroups. *ArXiv:2109.05302*, 2021.
- 3. Merlin Incerti-Medici and Abdul Zalloum. Sublinearly Morse boundaries from the viewpoint of combinatorics. *ArXiv:2101.01037*, 2021.
- 4. 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, 2021. DOI:10.4171/ggd/599
- 5. Merlin Incerti-Medici. Circumcenter extension maps for non-positively curved spaces. *ArXiv:2001.11472*, 2020.
- 6. 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
- 7. Merlin Incerti-Medici. The Nagata- and Hausdorff-dimension of intrinsic Möbius space. *ArXiv:1709.03254*, 2017.
- 8. Merlin Incerti-Medici. Möbius structures, quasi-metrics, and completeness. ArXiv:1706.10166, 2017.

Talks		
<b>&gt;</b> 17/11/2021	Detecting deformations of hyperbolic manifolds and normal growth; Invited speaker at the Young Researchers meeting of GDR Platon	
<b>&gt;</b> 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	
<b>1</b> 6/04/2020	Circumcenter extension maps for Hadamard manifolds; Topology and Geometric Group Theory seminar at Ohio State University	
<b>1</b> 8/03/2020	Topologies and metrics on the Morse boundary; Geometric Group Theory seminar at McGill University	
<b>)</b> 06/03/2020	Circumcenter extension maps for Hadamard manifolds; Dynamics, Geometry & Groups Seminar at Queen's University	
<b>1</b> 1/02/2020	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	

#### Merlin Incerti-Medici • IHES

**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

**▶** 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
 Software skills
 Basic: MATLAB, C++,
 Mathematica

▶ Other interests Classical Music Social Dances

Science Communication Philosophy and History of Science

Neuroscience Psychology & Behaviour