

Dorian Chanfi

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Experience

- Since 2022 **Postdoctoral researcher**, *Justus-Liebig-Universität Gießen*, Giessen.
Supported by the DFG within the project "Geometric Invariants of Discrete and Locally Compact Groups" led by Prof. Dr. Kai-Uwe Bux and Prof. Dr. Stefan Witzel until May 2023.
Alexander von Humboldt Fellow since June 2023.

Education

- 2018–2022 **Ph.D. in Mathematics**, *École Polytechnique*, Palaiseau.
Dissertation supervised by Bertrand Rémy.
"Analytic constructions of compactifications of Bruhat-Tits buildings"
Defended: December 12, 2022.
- 2017–2018 **Master 2 in Mathematics**, *Sorbonne Université*, Paris.
Pure mathematics curriculum, with highest honors.
Master's thesis supervised by Bertrand Rémy at CMLS (École Polytechnique)
"Rational points of quasi-reductive groups over local fields and their combinatorics".
- 2014–2018 **Élève at ENS de Lyon**, *École Normale Supérieure de Lyon*, Lyon.
2017 – 2018: *Master 2* in Mathematics, with highest honors
2016 – 2017: *Préparation à l'agrégation, option calcul formel* (teaching certification).
2015 – 2016: *Master 1* in Mathematics, with highest honors.
2014 – 2015: *Licence 3* in Mathematics, with honors.
- 2012–2014 **Classes préparatoires (MPSI-MP*)**, *Lycée Saint-Louis*, Paris.
Admitted to École Normale Supérieure de Lyon.

Teaching

- Fall 2023 **Lecturer**, *Justus-Liebig-Universität Gießen*.
Lecturer for a graduate course on Operator Algebras.
- 2018–2021 **Teaching assistant**, *École Polytechnique*.
Tutorial instructor (64h/year) for the course MAA201 (Euclidean and Hermitian Spaces) in second year of Bachelor.
- 2015–2018 **Oral examiner (*khôlleur*)**.
Conducted weekly oral examinations on groups of *classes préparatoires* students.
2017–2018: Lycée Chaptal (MPSI), Lycée Saint-Louis (MPSI)
2015–2016: Lycée aux Lazaristes (TSI 1)
- 2016–2017 **Academic tutor**, *École Normale Supérieure de Lyon*.
Mentored a first-year Bachelor student.
- 2014–2015 **Tutor at *ENSeigner***, *École Normale Supérieure de Lyon*.
A student organisation providing free tutoring to underprivileged high school students.

Publications and preprints

Dorian Chanfi. Polyhedral compactifications of Bruhat-Tits buildings of quasi-reductive groups. *arXiv e-print*, arXiv:2206.04775, June 2022. Submitted.

Dorian Chanfi. Wonderful compactifications of Bruhat-Tits buildings in the non-split case. *Israel Journal of Mathematics* (2023).

Awards and grants

- 2023 **Humboldt Research Fellowship**, *Alexander von Humboldt Foundation*.
- 2018–2021 **PhD grant from the ENS de Lyon**.
- 2014–2018 **Full scholarship**, *ENS de Lyon*.

Conference talks

- November 2023 **Immeubles de Bruhat-Tits: applications, représentations**, *Université de Poitiers*, Poitiers.
Polyhedral compactifications of Bruhat-Tits buildings
- September 2022 **Polygons, Buildings, and Related Geometries**, *Universiteit Gent*, Ghent.
Polyhedral compactifications of Bruhat-Tits buildings
- March 2022 **Colloque tournant du GDR TLAG**, *Institut de Mathématiques de Bourgogne*, Dijon.
Compactifications magnifiques d'immeubles de Bruhat-Tits

Seminar talks

- January 2021 **Algebra seminar**, *Institut Camille Jordan*, Lyon.
Compactifications magnifiques d'immeubles de Bruhat-Tits
- March 2020 **Doctoral seminar**, *École Polytechnique*, Palaiseau.
An introduction to Bruhat-Tits buildings and their compactifications
- January 2020 **Doctoral seminar**, *Institut Fourier*, Grenoble.
An introduction to Bruhat-Tits buildings and their compactifications

Conferences and research schools attended

- December 2023 **Colloque pour honorer la mémoire de Jacques Tits**, *Collège de France*, Paris.
- November 2023 **Immeubles de Bruhat-Tits: applications, représentations**, *Université de Poitiers*, Poitiers.
- October 2023 **Buildings conference 2023**, *Justus-Liebig-Universität Gießen*, Giessen.
- June 2023 **Workshop on Kac-Moody Geometry**, *Christian-Albrechts-Universität zu Kiel*, Kiel.
- May 2023 **Summer School on High-dimensional Expanders**, *Universiteit Gent*, Ghent.
- February 2023 **Young Geometric Group Theory XI**, *Universität Münster*, Münster.
- December 2022 **Algebras, Geometries, and Groups**, *Académie Royale de Belgique*, Brussels.

- September 2022 **Polygons, Buildings, and Related Geometries**, *Universiteit Gent*, Ghent.
- March 2022 **Topological and Homological Methods in Group Theory**, *Universität Bielefeld*, Bielefeld.
- March 2022 **Colloque tournant du GDR TLAG**, *Institut de Mathématiques de Bourgogne*, Dijon.
- February 2022 **Workshop on Finiteness Properties**, *Karlsruhe Institute of Technology*, Karlsruhe.
- December 2020 **Tropical Geometry, Berkovich Spaces, Arithmetic D -Modules and p -adic Local Systems**, *Imperial College London*, London.
- August 2019 **Summer School: Buildings and Affine Grassmannians**, *CIRM*, Luminy.
- July 2019 **Summer School: Perspectives in Linear Algebraic Groups**, *Ruhr-Universität Bochum*, Bochum.
- February 2019 **Curves and Groups in Families**, *Institut Henri Lebesgue*, Rennes.
- March 2018 **Model Theory and Applications**, *Institut Henri Poincaré*, Paris.
- December 2017 **Masterclass: Algebraic Stacks**, *Institut Henri Lebesgue*, Angers.

Other activities

Organisation of seminars

- 2023 **Co-organisation of the 29th "Buildings conference"**, *Justus-Liebig-Universität Gießen*, Giessen.
A series of conferences aiming at gathering specialists and young researchers interested in buildings and spaces of non-positive curvature.
- Since 2022 **Organisation of the "Oberseminar Geometrie, Topologie"**, *Justus-Liebig-Universität Gießen*, Giessen.
Seminar of the geometry working group.
- 2020–2021 **Co-organisation of the RéGA seminar**.
Seminar aimed at graduate students in the Paris area interested in all flavors of algebraic geometry.

Outreach

- 30/01/2020 **Participation in "Géométrie, arithmétique et analyse: Journée pour les enseignants du secondaire"**, *École Polytechnique*, Palaiseau.
Workshop aimed at high-school teachers.
- 12/10/2019 **Participation in the *Fête de la science***, *École Polytechnique*, Palaiseau.
Annual day of scientific outreach.

IT skills

- Languages Basic proficiency in Python, Caml, bash

Languages

- French Mother tongue
English Fluent

German Notions
Mandarin Notions