



# Mahya Mehrabdollahei

Postdoc  
Max Planck Institute for Mathematics, Bonn

- August 14, 1993 (Iranian-French)
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## Languages

- Persian ●●●●●●●●
- French ●●●●●●●●
- English ●●●●●●●●
- German ●●●●●●●●
- Arabic ●●●●●●●●

## Programming Skills

- Maple
- Sage
- C++

## Research Interest –

- Number theory
- Diophantine Geometry
- Algebraic Geometry
- Commutative Algebra
- Computational Algebra

## Academic positions

- 2026 Postdoc at Max Planck Institute for Mathematics, Bonn, (Mentor: Pieter Moree)
- 2022-2026 Postdoc at Georg-August-Universität Göttingen.

## Educations

- 2018 – 2022 **PhD in Mathematics.** Supervisors: **Fabrice ROUILLIER, Antonin GUILLOUX** Sorbonne University/IMJ-PRG/INRIA/FSMP. France
- 2017 – 2018 **Master (M2)** Msc in mathematics, Sorbonne University. France
- 2015 – 2017 **Master (M1 and M2)** MSc in mathematics, Sharif University of Technology, GPA 19.42. Iran
- 2011 – 2015 **Bachelor** BS in mathematics, Shahid Beheshti University, GPA 18.39. Iran

## Teaching Experiences

### University Teaching Experience

- 2025-2026 **Assistant for a Course on Analysis and Geometry** University of Göttingen. Germany
- 2024-2025 **Teaching Assistant for a seminar on Advanced Topics in Diophantine Geometry and a course on Elliptic Curves** University of Göttingen. Germany
- 2024-2025 **Teaching assistant of Algebra** University of Göttingen. Germany
- 2023-2024 **Teaching Assistant in Algebra and Geometry for trainee university instructors (course taught in German).** University of Göttingen. Germany
- 2023 – 2024 **Assistant and Teaching assistant of Analytic/Algebraic Number theory (3)** University of Göttingen. Germany
- 2022 – 2023 **Lecturer for a course in  $\LaTeX$**  University of Göttingen. Germany
- 2021 – 2022 **1-year position as an assistant professor in Mathematics at Sorbonne University :** France
  - Teaching assistant in the Series and Function series.
  - Teaching assistant in Mathematics (Calculus).
- 2020 – 2021 **Teaching assistant in Mathematics (Calculus) (I).** Sorbonne University. France
- 2019 – 2020 **Teaching assistant in Mathematics (Calculus) (II).** Sorbonne University. France
- 2016 – 2017 **Teaching assistant in Linear Algebra.** Sharif University of Technology. Iran
- 2014 – 2015 **Teaching assistant in Complex Analysis.** Shahid Beheshti University. Iran
- 2012 – 2013 **Teaching assistant in Ordinary Differential Equations.** Shahid Beheshti University. Iran

### School Teaching Experience

- Math professor at High school** Iran
- Instructor of Advanced Mathematics at Rah-e-Roshd High School.

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## Memberships



Georg-August-Universität  
Göttingen



Sorbonne University



Sharif University of Technology



Shahid Beheshti University



IMJ-PRG



Inria



Ouragan



Animath



Women and Mathematics

## Publications

- 2023 Mahya Mehrabdollahei, *Mahler measure of  $P_d$  Polynomial*, *Journal de Théorie des Nombres de Bordeaux*, Volume 35 (2023) no. 3, pp. 795-817.
- 2024 Francois Brunault, Antonin Guilloux, Mahya Mehrabdollahei, Riccardo Pengo, *Limits of Mahler measures in multiple variables*, *Annales de l'institut Fourier*, Online first, 44 p.
- 2025 Marie-José Bertin, Mahya Mehrabdollahei, *An exact family of bivariate polynomials and variants of Chinburg's Conjectures* *Annales Mathématiques de Québec*, accepted for publication, <https://doi.org/10.48550/arXiv.2407.20634>.

## Scholarships

- 2017 PGSM scholarship from FSMP<sup>1</sup> for master II. France
- 2018-2021 COFUND Doctoral Fellowship from FSMP & European Union, under the Marie Skłodowska-Curie Grant. France

## Honors and Awards

- 2011 Ranked in the top 1% among participants in the nationwide undergraduate university entrance exam. Iran
- 2015 Elected as a talented student at Shahid Beheshti University. Iran
- 2015 Selected as a talented student for the Master's program at Sharif University, admitted without an entrance exam. Iran
- 2017 Elected as a talented student at Sharif University of Technology. Iran
- 2017 A laureate of the **PGSM** scholarship of the "Foundation Sciences Mathématiques de Paris" for master 2. France
- 2018 A laureate of the **FSMP** Cofund scholarship from the European Union for PhD. France
- 2021 Accepted in the competitive examination of ATER at Sorbonne University. (Ranked Second) France
- 2021 A laureate of the **Kovalevskaya** Grants for participating in the International Congress of Mathematicians 2022 (Saint Petersburg) which was canceled as a consequence of the war.
- 2023 Qualified for the position of "maître de conférence" in France, No 23225361285. (Validity period: from 14/02/2023 to 31/12/2027.)
- 2024 Certificat en "Supervised Machine Learning", cours en ligne de DeepLearning.AI et de l'Université de Stanford.

## Scientific and social Activities

- Iran Referee of the 6th national *Kalaghha* Mathematics Competition at Shahid Beheshti University (2013).
- Iran Translator of the book *Circles* for the 6th national Kalaghha Mathematics Competition at Shahid Beheshti (2013).
- Iran Member of Shahid Beheshti's math science association for students (2013-2014).
- France Member of the equip Ouragan in Inria (2018-2022).
- France Co-organizer of the PhD students seminars in IMJ-PRG, "Séminaire des thésards" (2019-2021).
- France Member of the "BDD" at Sorbonne University (2019-2021).
- France Volunteer member for Animath Association. (2021- present).
- France Volunteer member for Femmes et Mathématiques ("Women and mathematics") Association (2021- present).
- France Volunteer at FSMP to guide the laureates of the FSMP scholarship (2022-present).

<sup>1</sup>FSMP=Fondation Sciences Mathématiques de Paris

## Invited expository talks

France 2021	<i>Mahler measure of <math>P_d</math> polynomials and relations with <math>L</math>-function</i> , Conference RSVP 'Rendez-vous on Special Values and Periods', ENS Lyon.
Germany 2021	<i>Mahler measure of <math>P_d</math> polynomials and relations with <math>L</math>-function</i> , weekly seminar of Topology, Göttingen University.
Denmark 2022	<i>Limits of Mahler measures in multiple variables</i> , Nordic Number Theory Network Days XVI, Copenhagen University.
Germany 2022	<i>The Mahler measure of a family of exact polynomials</i> , weekly seminar of Diophantine Geometry, Göttingen University.
Spain 2023	<i>Mahler measures and <math>L</math>-functions (some progress on Chinburg's Conjecture)</i> , Arithmetic of $L$ -functions Instituto de Ciencias Matemáticas, Madrid .
Netherlands 2023	<i>The Mahler measure of certain exact polynomial families</i> , An international conference on Mahler's measure, Radboud University, Nijmegen.
USA 2024	<i>Some progress regarding Chinburg's conjecture using a family of exact polynomials</i> , International Conference on $L$ -functions and Automorphic Forms, Vanderbilt University, Nashville, TN.
USA 2024	<i>Some progress regarding Chinburg's conjecture using a family of exact polynomials</i> , ANTS XVI, Sixteenth Algorithmic Number Theory Symposium, MIT, Cambridge, Massachusetts.
Germany 2024	<i>Some progress regarding Chinburg's conjecture</i> , Gottingen-Hanover Number theory Symposium, Gottingen.
England 2025	<i>Some progress regarding Chinburg's conjecture</i> , WINGS 2025: Women In Number theory and Geometry, Haydock.
Germany 2025	<i>New solutions to Chinburg's conjectures</i> , Number theory seminar, Max Planck Institute for Mathematics in Bonn.
Luxembourg 2025	<i>Several new solutions to Chinburg's conjectures</i> , 33èmes Journées Arithmétiques.
England 2025	<i>New solutions to Chinburg's conjectures</i> , PiFORUM25 Confrence, Queen Mary University of London.
Netherlands 2026	<i>New evidence to Chinburg's conjectures</i> , Workshop on Mahler measures of structured polynomials, Utrecht University.

## Attended conferences, schools, seminars

2018	Masterclass; <i>Mahler measures and special values of <math>L</math>-functions</i> .	Copenhagen, Denmark
2019	Research school; Spring School in Mathematical Computer Science.	CIRM, France
2020	Yearly Maple's conference 'Maplesoft'.	On line
2022	Conference in Diophantine Geometry and $L$ -functions.	Bordeaux, France
2023	Workshop on Diophantine geometry, groups, and number number theory at Academy Waldschlösschen.	Göttingen, Germany
2023	32èmes Journées Arithmétiques.	Nancy, France
2023	Conference on the Recent Advances in Number Theory "Numbers in the Universe".	Warsaw, Poland
2024	Modular Forms, $L$ -functions, and Eigenvarieties, ENS.	Paris, France
2024	Conference on Arithmetic Geometry and Applications, ICTP.	Trieste, Italy
2024	Mordell conjecture 100 years later, MIT, Cambridge.	Massachusetts, USA
2024	Analytic Number Theory and Arithmetic Statistics.	Montréal(Québec), Canada