

## Mahya Mehrabdollahei

#### Postdoc Göttingen University

August 14, 1993 (Iranian-French)

https://mahyamehrabdollahi.wixsite.com/website

mahya.mehrabdollahei@mathematik.unigoettingen.de

## Languages

•	Persian	• • • • •	
	French	•••••	
	English	•••••	
V	German	• • • • • •	
	Arabic	• • • • • •	

## **Programming Skills**

Maple

Sage

**©** C++

### Research Interest -

Number theory

**Diophantine Geometry** 

Algebraic Geometry

Commutative Algebra

Computational Algebra

## **Academic positions**

2022-2025 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)	France
	Msc in mathematics, Sorbonne University.	
2015 – 2017	Master (M1 and M2)	Iran
	MSc in mathematics, Sharif University of Technology, GPA 19	.42.
2011 – 2015	Bachelor	Iran
	BS in mathematics, Shahid Beheshti University, GPA 18.39.	

### **Teaching Experiences**

#### University Teaching Experience

2025	Assistant for a Course on Analysis and Geometry	Germany
2024–2025	University of Göttingen.  Assistant for a Course on Elliptic Curves  University of Göttingen.	Germany
2024–2025 i-	Teaching assistant of Algebra University of Göttingen	Germany
2023–2024	Assistant and Teaching assistant of Algebra-Geometry University of Göttingen	Germany
2023 – 2024	Assistant and Teaching assistant of Analytic/Algebraic Number theory (3)	Germany
2022 – 2023	University of Göttingen  Lecturer for a course in LTEX  University of Göttingen	Germany
2021 – 2022	1-year position as an assistant professor in Mathematics at Sorbonne University:	France
	<ul> <li>Teaching assistant in Mathematics (Calculus) (II).</li> </ul>	
	<ul> <li>Teaching assistant in Series and Function series.</li> </ul>	
2020 – 2021	<b>Teaching assistant in Mathematics (Calculus) (I).</b> Sorbonne University.	France

Teaching assistant in Mathematics (Calculus) (II).

Teaching assistant in Ordinary Differential Equations.

Teaching assistant in Linear Algebra.

Teaching assistant in Complex Analysis.

Sharif University of Technology.

Shahid Beheshti University

Shahid Beheshti University

#### School Teaching Experience

Sorbonne University.

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

France

Tran

Iran

Iran

### **Publications**

2019 – 2020

2016 – 2017

2014 – 2015

2012 – 2013

2021	MEHRABDOLLAHEI Mahya, Mahler measure of $P_d$ Polynomial,
	Journal de Théorie des Nombres de Bordeaux, Volume 35 (2023)
	no. 3, pp. 795-817.
2022	BRUNAULT Francois, GUILLOUX Antonin, MEHRABDOLLAHEI
	Mahya, PENGO Riccardo, Limits of Mahler measures in multiple
	variables Annales de l'institut Fourier Online first 44 n

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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

## **Pre-publications**

2024 BERTIN Marie-José, MEHRABDOLLAHEI Mahya  $P_d$  polynomials and

Variants of Chinburg's Conjectures (submitted), Preprint in arXiv:

https://doi.org/10.48550/arXiv.2407.20634.

## **Scholarships**

2017	PGSM scholarship for master II.	France
2018-2021	FSMP Cofund scholarship from the European Union for PhD.	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	Elected for a master's program at Sharif University without an	Iran
2015	entrance exam. The best student in Shahid Beheshti's scientific society of	Iran
2017	math. Elected as a talented student at Sharif University of	Iran
2017		rance
	Sciences Mathématiques de Paris" for master 2.	
2018		rance
	European Union for PhD.	
2021	Accepted in the competitive examination of ATER at	rance
	Sorbonne University.(Ranked Second)	
2021	A laureate of the <b>Kovalevskaya</b> 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,	N۰
2024	23225361285. Certificat en "Supervised Machin Learning", cours en ligne de	
	DeepLeaerning.AI et de l'Université de Stanford.	

## **Scientific and social Activities**

scholarship.(2022-present)

Iran	Referee of the 6th national Kalaghha Mathematics Competition at
Iran	Shahid Beheshti University.(2013)  Translator of the book <i>Circles</i> for the 6th national Kalaghha Mathe-
Iran	matics Competition at Shahid Beheshti.(2013)  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 math-
	ematics") Association.(2021- present)
France	Volunteer at FSMP to guide the laureates of the FSMP

## **Invited expository talks**

France 2021 $Mahler\ measure\ of\ P_d\ polynomials\ and\ relations\ with\ L-function,\ Cofference\ RSVP\ 'Rendez-vous\ on\ Special\ Values\ and\ Periods',\ ENLyon.$ Germany $Mahler\ measure\ of\ P_d\ polynomials\ and\ relations\ with\ L-function$ weekly seminar of Topology, Göttingen University.  Denmark $Limits\ of\ Mahler\ measures\ in\ multiple\ variables,\ Nordic\ Number\ Thomason of Network\ Days\ XVI,\ Copenhagen\ University.$ Germany $The\ Mahler\ measure\ of\ a\ family\ of\ exact\ polynomials,\ weekly\ seminal of\ Diophantine\ Geometry,\ Göttingen\ University.$	
2021 weekly seminar of Topology, Göttingen University.  Denmark 2022 Limits of Mahler measures in multiple variables, Nordic Number Theorem ory Network Days XVI, Copenhagen University.  Germany  The Mahler measure of a family of exact polynomials, weekly seminated to the seminated seminated to the seminated seminated to the seminated seminated to the seminated sem	
2022 ory Network Days XVI, Copenhagen University.  Germany The Mahler measure of a family of exact polynomials, weekly semin	n,
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Spain 2023 $Mahler measures and L-functions (some progress on Chinburg's Cojecture), Arithmetic of L-functions Instituto de Ciencias Matemática Madrid .$	
Netherlands The Mahler measure of certain exact polynomial families, An interpretational conference on Mahler's measure, Radboud University, I jmegen.	
USA 2024 Some progress regarding Chinburg's conjecture using a family exact polynomials, International Conference on <i>L</i> -functions an Automorphic Forms, Vanderbilt University, Nashville, TN.	
USA 2024 Some progress regarding Chinburg's conjecture using a family exact polynomials, ANTS XVI, Sixteenth Algorithmic Number Theo Symposium, MIT, Cambridge, Massachusetts.	
Germany Some progress regarding Chinburg's conjecture, Gottingen-Hanov 2024 Number theory Symposium, Gottingen.	er
England 2025 Some progress regarding Chinburg's conjecture, WINGS 202 Women In Number theory and Geometry, Haydock.	:5:
Germany New solutions to Chinburg's conjectures, Number theory semin 2025 Max Planck Institute for Mathematics in Bonn.	ar,
Luxembourg Several new solutions to Chinburg's conjectures, 33èmes Journée Arithmétiques.	es

# **Attended conferences, schools, seminars**

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