

# Teo Gil Moreno de Mora i Sardà

Laboratoire d'Analyse et de Mathématiques Appliquées Université Paris-Est Créteil 61 avenue du Général de Gaulle 94010 Créteil, France teo.gil-moreno-de-mora-i-sarda@u-pec.fr Universitat Autònoma de Barcelona Departamente de Matemàtiques Facultat de Ciències 08193 Bellaterra, Spain teo.gil@autonoma.cat

### **Education**

- 2022 2025 **PhD in Mathematics**, *Université Paris-Est Créteil*, *Universitat Autònoma de Barcelona*, (cotutelle) Supervisors: Stéphane Sabourau (UPEC), Florent Balacheff (UAB)
- 2021 2022 **M2 Master in Fundamental Mathematics**, Sorbonne Université, Université Paris Cité, Université Sorbonne Paris Nord, France

**Thesis**: Filling volume minimality for metrics close to the Euclidean metric.

Supervisor: Prof. Stéphane Sabourau

2017 – 2021 BSc in Mathematics, Universitat Autònoma de Barcelona, Spain

**Thesis**: Generalizations of the first Minkowski's theorem from a systolic geometry perspective.

Supervisor: Prof. Florent Balacheff

2015 – 2021 BSc in Physics, Universitat Autònoma de Barcelona, Spain

Thesis: Dynamical Superfluid-Insulator Transition of Bose-Einstein condensates in optical lattices.

Supervisor: Prof. Verònica Ahufinger.

### Publications

[1] F. Balacheff and T. Gil Moreno de Mora, *Isosystolic inequalities on two-dimensional Finsler tori*. EMS Surv. Math. Sci. (2024), published online first

### **Invited Talks**

### Talks in conferences

- Nov 2023 Forum des jeunes mathématicien·nes, Université Libre de Bruxelles, Belgium
- May 2023 Journées des Doctorants du LAMA, Université Gustave Eiffel and Université Paris-Est Créteil, France
- March 2020 Bernardo Cascales Functional Analysis School, Universidad de La Laguna, Spain

#### Seminar talks

- June 2024 Seminari de Geometria, Universitat Autònoma de Barcelona, Spain
- May 2024 Séminaire de Géométrie, Institut de Mathématiques de Jussieu Paris Rive Gauche, France
- April 2024 Colloque de Géométrie, Université Paris-Est Créteil, France
- April 2024 Séminaire des doctorants du LAMA, Université Paris-Est Créteil, France
- June 2023 Seminari Informal de Matemàtiques de Barcelona, Universitat de Barcelona, Spain
- March 2023 Seminari de Geometria, Universitat Autònoma de Barcelona, Spain

# Organization of Scientific Activities

May 2024 Journées des Jeunes Chercheurs ses du LAMA, Institut Henri Poincaré, France (22-24 May 2024)

2022 – 2024 Séminaire des doctorants, *Laboratoire d'Analyse et Mathématiques Appliquées, Université Paris-Est Créteil*, France

## Teaching

Jan 23–Apr 23 Analyse Réelle, L1 Mathématiques, Université Paris-Est Créteil (36h lectures)

Sep 22–Dec 22 Calculus 1, L1 Chimie, Université Paris-Est Créteil (30h lectures)

# Undergraduate Research Experience

### Sep 20 –Jul 21 Research Assistant, Mathematics department UAB, Barcelona, Spain

Supervisor: Prof. Florent Balacheff

Research project in systolic geometry, with further development of my BSc thesis.

#### Jul 20 –Sep 20 ICMAT Introduction to Research Program, Madrid, Spain

**Supervisor**: Prof. Francisco Presas

Project on contact geometry and Legendrian submanifolds, and their application to the space of light geodesics of a Lorentz manifold.

### July 2019 IFISC Summer Undergraduate Research Internship, Palma de Mallorca, Spain

Supervisor: Prof. David Sánchez

Project on the analysis of language variation in the United Kingdom using Twitter data and Big Data techniques.

### Jul 18 – Oct 18 ICFO Summer Fellows Program, Barcelona, Spain

Supervisor: Prof. Leticia Tarruell – Ultracold Quantum Gases group

Project on the development of an active stabilization system in order to stabilize the magnetic field fluctuations in the experimental set-up of the group.

### July 2016 ICFO Introductory internship, Barcelona, Spain

Supervisor: Dr. Miguel Ángel García

Programming based experience on the study of random walks on different geometrical settings.

### Awards and Scholarships

- 2021 2022 **PGSM Master Scholarship**, granted by the *Fondation Sciences Mathématiques de Paris*.
- 2020 2021 Beca de Colaboración grant BDNS 512590 by the Spanish MEFP
- 2015 2021 Academic Merit State Scholarship, funded 33% of my undergraduate degrees.
  - 2015 Extraordinary University Entrance Examination Award, awarded by the *Generalitat de Catalunya*.
  - 2015 University Entrance Scholarship, awarded by the Fundació Catalunya La Pedrera.

## Languages

**English** C2 Level - Cambridge Certificate French B2 Level - DELF B2

Spanish Native Catalan Native

Japanese B1 Level - JLPT N4

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