Teo Gil Moreno de Mora i Sardà

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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

Preprints F. Balacheff, T. Gil Moreno de Mora Sardà and S. Sabourau, *Complete 3-manifolds of positive scalar curvature with quadratic decay*, preprint arXiv (2024).

[1] F. Balacheff and T. Gil Moreno de Mora Sardà, *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 N3		