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. 11 (2024), no. 2, pp. 205-233

Talks

Talks in conferences

Oct 2024 Math SOMMa Junior Meeting, *Centre de Recerca Matemàtica*, Spain

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

Mar 2020 Bernardo Cascales Functional Analysis School, *Universidad de La Laguna*, Spain

Seminar talks

Oct 2024 Séminaire de Géométrie, *Institut de Mathématiques de Bordeaux*, France

Jun 2024 Seminari de Geometria, *Universitat Autònoma de Barcelona*, Spain

May 2024 Séminaire de Géométrie, *Institut de Mathématiques de Jussieu - Paris Rive Gauche*, France

Apr 2024 Colloque de Géométrie, *Université Paris-Est Créteil*, France

Apr 2024	Séminaire des doctorants du LAMA, *Université Paris-Est Créteil*, France
Jun 2023	Seminari Informal de Matemàtiques de Barcelona, *Universitat de Barcelona*, Spain
Mar 2023	Seminari de Geometria, *Universitat Autònoma de Barcelona*, Spain

Poster presentations

Jun 2024	European Doctorate School of Differential Geometry, *Instituto de Matemáticas de la Universidad de Granada*, Spain

Teaching

Jan 25–Apr 25	Analyse Réelle, *L1 Mathématiques, Université Paris-Est Créteil* (36h lectures)
Jan 24–Apr 24	Analyse Réelle, *L1 Mathématiques, Université Paris-Est Créteil* (36h lectures)
Sep 22–Dec 22	Calculus 1, *L1 Chimie, Université Paris-Est Créteil* (30h lectures)

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

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		

Computer skills

Programming Languages	Python, C, R	**Other**	SageMath, LaTeX

Attended conferences and schools

Oct 2024	Math SOMMa Junior Meeting, *Centre de Recerca Matemàtica*, Spain
Aug 2024	Metric Geometry and Geometric Measure Theory, *Université de Fribourg*, Switzerland
Jun 2024	European Doctorate School of Differential Geometry, *Instituto de Matemáticas de la Universidad de Granada*, Spain
Mar 2024	Surfaces, Manifolds and Related Topics, *Université du Luxembourg*, Luxembourg
Nov 2023	Forum des jeunes mathématicien·nes, *Université Libre de Bruxelles*, Belgium
Oct 2023	Probability and Geometry in, on and of non-Euclidian spaces, *Centre International de Rencontres Mathématiques*, France
Jun 2023	Interactions between geometry and topology, *Banyuls de la Marenda*, France
Mar 2023	Geometry, probability and their synergies, *Les Diablerets*, Switzerland
Nov 2022	Paroles aux jeunes chercheuses et chercheurs en géométrie et dynamique, *Institut Mathématique d'Orsay* , France
Sep 2022	Workshop on Topological Methods in Geometry, *Centre de Recerca Matemàtica*, Spain
Mar 2020	Bernardo Cascales Functional Analysis School, *Universidad de La Laguna*, Spain

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.

Jul 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.

Jul 2016 **ICFO Introductory internship**, *Barcelona, Spain*
Supervisor: Dr. Miguel Ángel García
Programming based experience on the study of random walks on different geometrical settings.