



GEOMETRY, DYNAMICS
AND FIELD THEORY NETWORK

April 2025

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Contents

Network's activities	1
Outstanding workshop	1
Other scientific events	1
Online courses	5
Virtual seminars	5
Opportunities	5
Ph.D. offers	5
Postdoctoral fellowships . .	6
Offers for researchers	7
Research visit offers	8
Financial support	8
News and publications	9
Journals	9
Preprints	9
Network's members	9
Network's collaborators . .	10
Thematic partner groups	11
Links of interest	11
Newsletters	11
Entities	11
Journals	12
Prizes and awards	12

Geometry, Dynamics and Field Theory Network Infosheet

Network's activities

XVII International ICMAT Summer School on Geometry, Dynamics and Field theory.
23–27 June 2025, Miraflores de la Sierra, Spain.

Outstanding workshop

XXXIII International Fall Workshop on Geometry and Physics.
9–12 September 2025, Córdoba, Spain.

Other scientific events

Minicourse on Partial Differential Equations: Analytical and Numerical Tools.
1 May–30 June 2025, São Paulo, Brazil.

Workshop on Differential Equations and Their Applications.
4–6 May 2025, Będlewo, Poland.

Control Theory and Inverse Problems.
5–7 May 2025, Monastir, Tunisia.

Advanced School on Mapping Class Groups, Surface Subgroups, Bundles, and Group Extensions.
5–9 May 2025, Madrid, Spain.

Spring Time in Mathematical Quantum Physics.
5–9 May 2025, Vancouver, Canada.

Minicourse on Partial Differential Equations: Analytical and Numerical Tools.
5 May–30 June 2025, São Paulo, Brazil.

Trimester Program: Probabilistic methods in quantum field theory.
5 May–15 August 2025, Bonn, Germany.

Workshop for Research and Workforce Development in Fluid Mechanics.

9 May–11 May 2025, Lincoln, USA.

SIAM Conference on Applications of Dynamical Systems.

11–15 May 2025, Denver, USA.

Effective theories for many-body systems out of equilibrium.

11–16 May 2025, Les Diablerets, Switzerland.

Mathematical Advances in Geophysical Fluid Dynamics.

11–16 May 2025, Oberwolfach, Germany.

Nonlinear Dispersive Equations: Advances and Perspectives.

12–16 May 2025, Luminy, France.

School: Probabilistic methods in quantum field theory.

12–16 May 2025, Bonn, Germany.

Rencontre Poisson à La Rochelle and Poisson Sigma model days.

14–16 May 2025, La Rochelle, France.

International Conference on Dynamical Systems, Control & Related Fields.

15–16 May 2025, Fes, Morocco.

Differential games, control theory and optimization.

19–21 May 2025, Chelyabinsk, Russia.

Basics of Nonequilibrium Statistical Mechanics.

19–23 May 2025, Leuven, Belgium.

Workshop: Random geometry and its connections to QFT.

19–23 May 2025, Bonn, Germany.

The International Conference on Riemannian Geometry and Applications.

23–25 May 2025, Bucharest, Romania.

Modern topics in quantum many-body physics, from chaos to integrability.

25–30 May 2025, Les Diablerets, Switzerland.

Non-Euclidean Geometry in Modern Physics and Mathematics.

26–29 May 2025, Saïdia, Morocco.

Physics and Mathematics of Hydrodynamic and Wave Turbulence.

26–30 May 2025, Luminy, France.

Conference on Quantum Physics: from Foundations to Emerging Technologies.

28–30 May 2025, Trieste, Italy.

Structure Preserving Schemes for Complex Nonlinear Systems.

1–6 June 2025, Hangzhou, China.

Summer School on Dynamics and Geometry in Dimension 1, 2 and 3.

2–6 June 2025, Luminy, France.

Conference on Quantum Topology and Hyperbolic Geometry.

2–6 June 2025, Phu Quoc, Vietnam.

Beyond Uniform Hyperbolicity I: Higher rank actions, random walks and holomorphic dynamics.

2–6 June 2025, Trieste, Italy.

LG&TBQ2: Geometry, Topology, and Dynamics.

2–6 June 2025, Montreal, Canada.

Distributed Computing and Cyber-Physical Systems.

2–6 June 2025, Opatija, Croatia.

Geometry, topology and mathematical physics.

2–6 June 2025, Moscow, Russia.

XXVth International Conference Geometry, Integrability and Quantization.

5–12 June 2025, Varna, Bulgaria.

Great Lakes Mathematical Physics Meeting.

6–8 June 2025, Lexington, USA.

Physical Mathematics of Quantum Field Theory.

9–13 June 2025, Amherst, USA.

Summer school on Quantum Topology and Hyperbolic Geometry.

9–13 June 2025, Hanoi, Vietnam.

Workshop on Optimization, Dynamics and Convex Analysis.

11–14 June 2025, Aveiro, Portugal.

School - Topological Symmetries and Defects in Quantum Field Theory.

15–20 June 2025, Les Diablerets, Switzerland.

The Yang-Baxter equation and all that.

15–21 June 2025, Będlewo, Poland.

School: Topological Symmetries and Defects in Quantum Field Theory.

15–27 June 2025, Les Diablerets, Switzerland.

Control Theory and Mathematical Modeling.

16–20 June 2025, Izhevsk, Russia.

Perfectly matched perspectives on statistical mechanics, combinatorics and geometry.

16–20 June 2025, Luminy, France.

Symplectic Dynamics and Topology.

16–20 June 2025, Cosenza, Italy.

Workshop on Model Theory, Algebraic Dynamics, and Differential-Algebraic Geometry.

16–20 June 2025, Toronto, Canada.

Noncommutative Geometry and Higher Structures.

16–20 June 2025, Genova, Italy.

International Workshop on Lie Theory and Its Applications in Physics.

16–22 June 2025, Varna, Bulgaria.

Research School in Geometry.

16–27 June 2025, Cuernavaca, Mexico.

Anomalies, Topology and Quantum Information in Field Theory and Condensed Matter Physics.

16–27 June 2025, São Paulo, Brazil.

Optimal Transport, Heat Flow and Synthetic Ricci Bounds.

17–21 June 2025, Pisa, Italy.

5th IFAC Workshop on Control of Systems Governed by Partial Differential Equations.

18–20 June 2025, Beijing, China.

Workshop: Topological Symmetries and Defects in Quantum Field Theory.

22–27 June 2025, Les Diablerets, Switzerland.

Blooming Beasts: A Conference on the Geometry, Topology, and Dynamics of Infinite-Type Surfaces.

22–27 June 2025, Oaxaca, Mexico.

Effective theories in classical and quantum particle systems.

23–27 June 2025, Trieste, Italy.

Sub-Riemannian geometry, spectral asymptotics and noncommutative geometry.

23–27 June 2025, Lund, Sweden.

Connections with Diffeomorphism Groups.

23–27 June 2025, Austin, USA.

Workshop: Integrable QFT: conformal bootstrap, bosonization, near-critical perturbations, and Coulomb gas.

23–27 June 2025, Bonn, Germany.

Barcelona Summer School on Floer Theory.

25–27 June 2025, Barcelona, Spain.

The William Rowan Hamilton Geometry and Topology Workshop.

30 June–4 July 2025, Dublin, Ireland.

Differential Geometry L'Aquila 2025.

30 June–4 July 2025, L'Aquila, Italy.

Interactions of Poisson Geometry, Lie Theory and Symmetry.

30 June–4 July 2025, Lisbon, Portugal.

Quantum Field Theory and Topological Phases via Homotopy Theory and Operator Algebras.

30 June–11 July 2025, Bonn, Germany.

Noncommutative Algebraic Geometry.

30 June–11 July 2025, Antwerp, Belgium.

Dynamische Systeme.

6–11 July 2025, Oberwolfach, Germany.

Workshop on New Pathways in Exploration of Quantum Field Theory and Quantum Gravity beyond Supersymmetry IV.

7–11 July 2025, Trieste, Italy.

Complex Geometry, Complex Analysis and Dynamics.

7–11 July 2025, Luminy, France.

Partial Differential Equations of Classical Physics.

7–25 July 2025, New York, USA.

Women in Groups, Geometry, and Dynamics III.

13–18 July 2025, Banff, Canada.

Geometry and Dynamics in Higher Rank Lie Groups.

14–25 July 2025, Berkeley, USA.

16th Viennese Conference on Optimal Control and Dynamic Games.

15–18 July 2025, Wien, Austria.

IFAC Joint Symposia on Mechatronics & Robotics.

15–18 July 2025, Paris, France.

10th International Conference on Automation, Control and Robotics Engineering.

16–19 July 2025, Wuxi, China.

Summer School of Mathematical Physics.

16 July–16 August 2025, Hradec Králové, Czech Republic.

Partial Differential Equations.

20–25 July 2025, Oberwolfach, Germany.

Recent Developments in Logarithmic Conformal Field Theory.

20–25 July 2025, Banff, Canada.

Advanced Methods of Modern Theoretical Physics: Integrable and Stochastic Systems.

20–25 July 2025, Dubna, Russia.

Formalizing Class Field Theory.

21–25 July 2025, Oxford, United Kingdom.

Non-equilibrium statistical physics: mathematical and physical advances.

21–25 July 2025, Firenze, Italy.

Topological and Geometric Structures in Low Dimensions.

21 July–1 August 2025, Berkeley, USA.

13th IFAC Symposium on Nonlinear Control Systems.

23–25 July 2025, Reykjavik, Iceland.

SIAM Conference on Control and Its Applications.

28–30 July 2025, Montréal, Canada.

Workshop on Spectral Geometry, PDEs and Mathematical Physics.

28–30 July 2025, Hagen, Germany.

Workshop: Gauge theories and spin systems: Yang-Mills theory, continuous symmetry, and disorder.

28 July–1 August 2025, Bonn, Germany.

Recent Advances in PDE and Mathematical Physics.

3–8 August 2025, Oaxaca, Mexico.

Around Singularities in Poisson Geometry.

3–8 August 2025, Hangzhou, China.

Finite Dimensional Integrable Systems in Geometry and Mathematical Physics.

4–8 August 2025, Guanajuato, Mexico.

Holomorphic-topological field theories and representation theory.

11–15 August 2025, Toronto, Canada.

Structures and Processes: Dynamical, Geometric, and Random.

18–22 August 2025, Toronto, Canada.

School on Quantum Dynamics of Matter, Light and Information.

18 August–5 September 2025, Trieste, Italy.

Holomorphic Dynamics.

24–29 August 2025, Oaxaca, Mexico.

Intersections of Topological Recursion, Conformal Field Theory, and Random Geometry.

24–29 August 2025, Les Diablerets, Switzerland.

Orbit equivalence and topological and measurable dynamics.

25–29 August 2025, Luminy, France.

Geometry and Convergence in Mathematical General Relativity.

25 August–3 October 2025, New York, USA.

Quantum control of rotational dynamics.

1–3 September 2025, Paris, France.

Mathematical Results in Quantum Theory.

1–5 September 2025, Munich, Germany.

Modern Problems of Mathematics and Mechanics.

3–6 September 2025, Baku, Azerbaijan.

7th International Applied Mathematics, Modelling and Simulation Conference.

5–7 September 2025, Athens, Greece.

Equivariant Topological Quantum Field Theory.

7–12 September 2025, Oaxaca, Mexico.

Differential Geometry and its Applications.

8–12 September 2025, Brno, Czechia.

QFT at the crossroads between mathematics and physics.

15–17 September 2025, Rome, Italy.

Geometric Measure Theory on Metric Spaces with Applications to Physics and Geometry.

15–19 September 2025, New York, USA.

3rd IMA Conference on Mathematics of Robotics.

24–26 September 2025, Manchester, United Kingdom.

Analysis of Many-body Quantum Systems.

5–10 October 2025, Oberwolfach, Germany.

Integrable systems and quantum theory.

6–11 October 2025, Saint Petersburg, Russia.

Phase Transitions and Turbulence including Fluids.

19–24 October 2025, Oberwolfach, Germany.

Online courses

Introduction to Numerical Methods for Partial Differential Equations.

23–26 June 2025, Calicut, India.

Numerical Simulation and Analysis of Elliptic and Parabolic PDEs using Differential Quadrature Methods and FEMs.

21–24 July 2025, Roorkee, India.

Virtual seminars

Seminar of the Geometry, Dynamics, and Field Theory Thematic Network.

Instituto de Ciencias Matemáticas' seminars on these topics.

Geometry and Applications: Modern Mathematical Approaches (GAMMA) Seminar.

University of Warsaw, the Universitat Rovira i Virgili, and the Polytechnic University of Catalonia.

Advanced Lectures on Theoretical Physics and Mathematics.

ICTP-PWF Latin America-Physics Latam New Seminar Series.

Trans-Carpathian Seminar on Geometry and Physics.

A merger of Bucharest Geometry and Physics Seminar and Warsaw Seminar on Geometric Methods in Physics.

One World IAMP Mathematical Physics Seminar.

Seminar of International Association of Mathematical Physics.

Seminar on Geometry with Symmetries.

On Lie group actions in Riemannian geometry.

Control and Optimization Seminar.

Louisiana State University.

Differential Geometry Seminar Torino.

Organised by the Differential Geometry groups of Università di Torino and Politecnico di Torino.

Symplectic Zoominar.

Online Seminar organized by CRM-Montréal, Princeton/IAS, Tel Aviv, and Paris.

ICTP Virtual Seminars.

Online Seminar organized by International Centre for Theoretical Physics.

Theory of Duality Seminar.

Department of Mathematical Methods in Physics, University of Warsaw.

Geometry and Topology Online.

Warwick Mathematics Institute.

Instituto Balseiro Seminar.

Instituto Balseiro' public seminars live on Youtube.

Opportunities

Ph.D. offers

Doctoral student in applied and computational mathematics.

KTH – Royal Institute of Technology, Stockholm, Sweden

Closing date: 5 May 2025.

PhD Position: Entropy and Spectral Geometry.

Radboud University, Nijmegen, Netherlands

Closing date: 5 May 2025.

Call for admission to the PhD Courses and scholarships.

University of Padua, Italy

Closing date: 13 May 2025, 13:00 CEST.

PhD Position: Mathematical Relativity.

Radboud University, Nijmegen, Netherlands

Closing date: 15 May 2025.

PhD position in Applied Geometry.

University of Vienna and TU Wien, Vienna, Austria

Closing date: 19 May 2025.

13 PhD positions in Cohomology, Geometry, Explicit Number Theory.

Stichting Vrije Universiteit Amsterdam (VUA), Netherlands; Technische Universität Braunschweig (TUB), Germany; Université de Bordeaux (UBx), France; and University of Galway, Ireland.

Closing date: 30 May 2025 - 16:00 (Europe/Paris).

Doctoral Researcher in Computational Mechanics.

University of Luxembourg, Luxembourg

Closing date: 31 May 2025.

PhD position in Higher-Order Flexibility of Geometric Structures.

University of Vienna and TU Wien, Vienna, Austria

Closing date: 1 June 2025.

Postdoctoral fellowships

One or two postdoctoral positions.

Instituto de Matemáticas (IM) of the Universidad Nacional Autónoma de México (UNAM), Mexico City, Mexico

Closing date: 4 May 2025.

Postdoctoral position in Numerical Analysis.

Lund University, Sweden

Closing date: 5 May 2025.

Postdoc in networked control systems.

KTH – Royal Institute of Technology, Stockholm, Sweden

Closing date: 11 May 2025.

Assistant Professor in Applied Mathematics / Statistics.

University assistant predoctoral/PhD Candidate in quantum foundations and quantum information theory.

University of Vienna, Vienna, Austria

Closing date: 6 June 2025.

PhD scholarship in the project “Graded differential geometry with applications”.

Institute of Mathematics of the Polish Academy of Sciences, Warsaw, Poland

Closing date: 15 June 2025.

PRELUDIUM 24.

National Science Centre, Poland

Closing date: 17 June 2025, 16:00 CEST.

PhD position in Numerical simulation of coupled Seismo-Hydro-Mechanical processes in seismicity induced by subsurface fluid injection.

University Cote d’Azur, Nice, France

Closing date: 30 August 2025.

4 PhD positions in Mathematics.

University of Luxembourg, Luxembourg

Closing date: Open. Applications will be processed upon reception.

Several PhD opportunities.

University of Birmingham, England, UK

Closing date: Applications accepted all year round.

PhD Position in Differential Geometry.

UniDistance Suisse, Brig, Switzerland

Closing date: Applications are reviewed on a rolling basis.

University of Nottingham, Ningbo, China

Closing date: 12 May 2025.

Open call for temporary research positions for young mathematicians.

Institute of Mathematics of the Polish Academy of Sciences, several cities in Poland

Closing date: 16 May 2025.

SISSA Mathematical Fellowships.

International School for Advanced Studies (SISSA), Trieste, Italy

Closing date: 19 May 2025.

Postdoctoral scholarship (2 years) in Stochastic Geometry on M-Polyfolds.

Umea University, Sweden

Closing date: 31 May 2025.

Research Positions at the Center for Complex Geometry.

IBS Center for Complex Geometry, Daejeon, South Korea

Closing date: 2 June 2025.

Postdoctoral position in Quantum Information Theory.

Centre Inria de Saclay, Palaiseau, France

Closing date: 30 June 2025.

Postdoctoral Researcher in Mathematical Physics and Geometry.

Centre for Mathematics, Technical University of Munich, Germany

Closing date: 30 June 2025.

Offers for researchers

Senior Lecturer on the Division of Algebra and Geometry.

University of Gotheburg, Sweden

Closing date: 4 May 2025.

Associate Professor in Geometry and Dynamics.

Côte d'Azur University, Nice, France

Closing date: 15 May 2025.

Lecturer in Applied Mathematics.

Aston University, Birmingham, UK

Closing date: 16 May 2025.

Tenure Track Researcher in Geometry and/or Analysis.

Universidad Nacional Autónoma de México, Cuernavaca, Morelos, Mexico

Closing date: 25 June 2025.

Tenure-track (or tenured) faculty positions.

School of Mathematics and Statistics, Xi'an Jiaotong University, Shaanxi, China

Closing date: 31 July 2025.

Assistant/Associate/Full Professor, Mathematics.

Yale University, Connecticut, USA

Closing date: 31 August 2025.

Faculty Positions.

Department of Mathematics, Bilkent University, Ankara, Turkey

Faculty and Postdoctoral Fellow Positions in Mathematics.

School of Sciences, Great Bay University, China

Closing date: 1 December 2025.

Humboldt Research Fellowship for Postdoctoral Researchers.

Alexander von Humboldt Foundation

Closing date: Open.

Tenure-Track and Post-Doc Positions.

Mathematics Research Lab, Baku State University, Azerbaijan

Closing date: The hiring committee will begin reviewing applications immediately. Positions will remain open until filled.

Closing date: 15 October 2025.

Professor/Associate Professor/Assistant Professor positions.

Department of Mathematics, The Chinese University of Hong Kong, Hong Kong

Closing date: 22 October 2025.

Faculty and Postdoctoral Fellow Positions in Mathematics.

School of Sciences, Great Bay University, China

Closing date: 1 December 2025.

Tenured/tenure-track faculty.

Institute of Mathematical Sciences, ShanghaiTech University, Shanghai, China

Closing date: Open. Applications will be evaluated on a rolling basis until all the positions are filled.

Tenure-Track and Post-Doc Positions.

Mathematics Research Lab, Baku State University, Azerbaijan

Closing date: The hiring committee will begin reviewing applications immediately. Positions will remain open until filled.

Faculty Positions in Mathematical Sciences.

School of Mathematics and Statistics, Beijing Institute of Technology, China

Closing date: Applications are reviewed on a rolling basis year-round. Early submission is encouraged.

Research visit offers

Visiting Scholars or Consultants to Institutes in Developing Countries.

International Centre of Theoretical Physics (ICTP).

To expert advice to enhance existing activities or to initiate a new research programme.

Closing date: 31 May.

Abel Visiting Scholar Program.

International Mathematical Union.

Postdoctoral mathematician to visit a research collaborator for a month.

Closing date: 31 August, 31 December and 30 April.

Simons Visiting Professors at Mathematisches Forschungsinstitut Oberwolfach.

Oberwolfach, Germany.

Junior or senior scientists from outside Europe.

Closing date: Open.

Focused research groups in Banff, Canada.

Banff International Research Station, Canada.

Up to 8 researchers for periods of 1 to 2 weeks.

Closing date: Minimum 4 months before the event.

Research in Teams in Banff, Canada.

Banff International Research Station, Canada.

Teams of 2 to 4 researchers for 1 to 2 weeks.

Closing date: Minimum 4 months before the event.

International Research in Groups at CIRM.

Centre International de Rencontres Mathématiques (CIRM), France.

Small groups of researchers for 2 to 4 weeks.

Closing date: Open at any time.

Research in Residence at CIRM.

Centre International de Rencontres Mathématiques (CIRM), France.

2 to 4 researchers.

Closing date: Open at any time.

Visiting scholar opportunity in Cambridge.

University of Cambridge, United Kingdom.

Scholars and fellows for development of research, teaching and collaboration.

Closing date: Open.

Small team visiting the CRM.

Centre de Recerca Matemàtica, Catalonia, Spain.

Postdoctoral positions and research in pairs.

Closing date: Any time between 6 and 12 months before the start of the desired stay.

Visiting research fellow in Kent State University.

Mathematics Department-KSU, Ohio, USA.

Visiting for scholar researchers.

Closing date: Open.

Financial support

ICTP Grants for Visiting Scholars or Consultants.

Assistance to institutes or research groups in a developing country requiring expert advice to enhance existing activities or to initiate a new research programme.

Deadline: 31 May or 30 September.

IMU Volunteer Lecturer Program.

Financial assistance to universities in developing countries to host a 3-4-week intensive course.

Deadline: 1 September.

CIMPA Schools in Partnership.

Asian and European schools in mathematics (AESIM).

Deadline: 30 September 2025.

Trimester Programs.

Hausdorff Research Institute for Mathematics, Bonn, Germany.

Deadline: 30 September 2025.

Thematic Programs at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: 1 October, 1 December and 1 March every year. Three years ahead.

Hot topics Workshop at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: 1 October, 1 December and 1 March every year.

Summer Graduate Schools at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: 1 October, 1 December and 1 March every year.

Full or Half-year Scientific Programs.

Simons Laufer Mathematical Sciences Institute, Berkeley, United States.

Deadline: 1 October, 1 December and 1 March every year.

Hot Topic Workshops.

Simons Laufer Mathematical Sciences Institute, Berkeley, United States.

Deadline: 1 October, 1 December and 1 March every year.

Revisiting Fundamental Problems Workshop.

Simons Laufer Mathematical Sciences Institute, Berkeley, United States.

Deadline: 1 October, 1 December and 1 March every year.

Workshop at CIRM.

Centre International de Rencontres Mathématiques, France.

Deadline: Open at any time.

CIMPA Online Courses Program.

Geographic areas of activities of CIMPA (Africa, Central or South America, Asia).

Deadline: Open all year.

Support for Workshop Organization at Banff.

Banff International Research Station.

Deadline: No precise deadline.

Proposal of a Workshop in the Mathematisches Forschungsinstitut Oberwolfach.

Oberwolfach, Germany.

Deadline: Open.

Targeted Grants in Mathematical and Physical Sciences.

Simons Laufer Mathematical Sciences Institute, Berkeley, United States.

Deadline: At any time.

Hosting a workshop at AIMS South Africa.

Contributions for workshops about AIMS's research focus areas.

Deadline: No precise deadline.

News and publications

Journals

Journal Geometric Mechanics.

Published by World Scientific about applications of geometric methods in mechanics, dynamics, control, transport, stochastic processes, data science, and learning.

Deadline: No precise deadline.

Geometric methods in mechanics and

physics.

Open-access sponsored by the International Research Center for Mathematics & Mechanics of Complex Systems Journal (Italy). On topics such as variational methods, numerical methods, and optimization techniques.

Deadline: No precise deadline.

Preprints

Network's members

Ángel Ballesteros, Diego Fernández-Silvestre, Flaminia Giacomini and Giulia Gubitosi: *Quantum Galilei group as quantum reference frame transformations.*

2504.00569

[quant-ph, gr-qc, hep-th, math-ph, math.MP]

Alexandre Anahory Simões, María Barbero Liñán, Anthony Bloch, Leonardo Colombo and David Martín de Diego: *Retraction maps in optimal control of nonholonomic systems.*

2504.00808

[math.NA, cs.NA, math.DG, math.OC]

Giannis Delimpaltadakis, Pol Mestres, Jorge Cortés and W. P. M. H. Heemels: *Feedback Optimization with State Constraints through Control Barrier Functions.*

2504.00813

[math.OC, cs.SY, eess.SY]

Efstathios Stratoglou, Alexandre Anahory Simões, Anthony Bloch and Leonardo Colombo: *Virtual nonlinear nonholonomic constraints from a symplectic point of view.*

2504.00866

[math.DG, math.OC]

V. M. Jiménez and M. De León: *The contact Eden bracket and the evolution of observables.*

2504.00997

[math-ph, math.DG, math.MP]

V. M. Jiménez, M. De León and M. Epstein: *Double groupoids of composites: applications to uniformity.*

2504.02363

[math-ph, math.MP]

Omayra Yago Nieto, Alexandre Anahory Simões,

Juan I. Giribet and Leonardo J. Colombo: *Learning-based decentralized control with collision avoidance for multi-agent systems.*

2504.09730

[eess.SY, cs.SY, math.OC]

Verónica Errasti Díez, Jordi Gaset Rifà and Manuel Lainz: *Symplectic approach to global stability.*

2504.16169

[math-ph, hep-th, math.MP]

Network's collaborators

Ruben Louis and Camille Laurent-Gengoux: *The holonomy Lie ∞ -groupoid of a singular foliation I.*

2503.23871

[math.CT, math.DG]

Moise R. Mouyebé and Anthony M. Bloch: *Coupling Induced Stabilization of Network Dynamical Systems and Switching.*

2504.00403

[math.DS]

Holger Dullin and Richard Montgomery: *The N-Body Problem on Coadjoint Orbits.*

2504.01272

[math-ph, math.MP]

Arjan van der Schaft, Rodolphe Sepulchre and Tom Chaffey: *Symmetry in linear physical systems.*

2504.02062 (version 2)

[math.OC]

Marcelo Epstein: *On a generalized principle of fractal stiffness self-similarity.*

2504.03082

[math-ph, math.MP]

Jean-Pierre Gazeau, Mariano A. del Olmo and Hamed Pejhan: *Holomorphic Discrete Series of $SU(1,1)$: Orthogonality Relations, Character Formulas, and Multiplicities in Tensor Product Decompositions.*

2504.03901

[math.GR, math-ph, math.MP, quant-ph]

Alexey Bolsinov, Holger R. Dullin, Vladimir S. Matveev and Yury Nikolayevsky: *On Separation of Variables for Symmetric Spaces of Rank 1.*

2504.04999

[math.DG, math-ph, math.DS, math.MP, nlin.SI]

Simone Betteti and Francesco Bullo: *Contraction and concentration of measures with applications to theoretical neuroscience.*

2504.05666

[math.DS, math-ph, math.AP, math.MP]

Marius Crainic, Rui Loja Fernandes and David Martínez Torres: *Poisson Manifolds of Compact Types.*

2504.06447

[math.DG, math.GR, math.SG]

Alessio Franci, Bart Besselink and Arjan van der Schaft: *Singular networks and ultrasensitive terminal behaviors.*

2504.07628

[math.OC]

Aritra Ghosh, Anindya Ghose-Choudhury and Partha Guha: *On novel Hamiltonian descriptions of some three-dimensional non-conservative systems.*

2504.10729

[math-ph, math.DS, math.MP, math.SG, nlin.CD, nlin.SI]

Anthony M. Bloch and Tudor S. Ratiu: *The Monge–Kantorovich problem, the Schur–Horn theorem, and the diffeomorphism group of the annulus.*

2504.12924

[math.OC]

Adrian Wiltz and Dimos V. Dimarogonas: *Predictive Synthesis of Control Barrier Functions and its Application to Time-Varying Constraints.*

2504.15830

[eess.SY, cs.SY, math.OC]

Ilka Agricola, Dario Di Pinto, Giulia Dileo and Marius Kuhrt: *A new approach to the classification of almost contact metric manifolds via intrinsic endomorphisms.*

2504.16900

[math.DG, 53C15, 53C10, 53D15, 53C25]

Ruikang Liang, Eugenio Pozzoli, Monika Leibsch, Mario Sigalotti, Christiane P. Koch and Ugo

Boscain: *Enhancing the controllability of quantum systems via a static field.*

2504.17303

[math.OC]

Karthekeyan Chandrasekaran, Siyue Liu and R. Ravi: *Minimum Cost Nowhere-zero Flows and Cut-balanced Orientations.*

2504.18767

[cs.DS, math.CO, math.OC]

Giovanni da Silva Nunes and Jaime Ripoll: *A lower bound of the energy functional of a class of vector fields and a characterization of the sphere.*

2504.18975

[math.DG]

İsmail Burak Ateş, Sengül Kuru and Javier Negro: *SUSY hierarchies of Jaynes-Cummings Hamiltonians with different detuning parameters.*

2504.19943

[math-ph, math.MP, quant-ph]

Thematic partner groups

GEOMETRY, DYNAMICS AND FIELD THEORY NETWORK

Mathematical physics group - Universidad de Burgos (Burgos, Spain)

Geometry group - Universität Würzburg (Würzburg, Germany)

Geometric mechanics group - Universidad Nacional del Sur (Bahía Blanca, Argentina)

Geometry group - Università degli Studi di Salerno (Salerno, Italy)

Geometry and mathematical physics group

- **Loughborough University** (Loughborough, United Kingdom)

Q-Math group - Universidad Carlos III (Madrid, Spain)

Geometry, dynamics, and learning team - **Nanyang Technological University** (Singapore, Singapore)

Control and geometry team - **Inria Paris Center** (Paris, France)

Geometrical mathematical physics research group (Madrid, Spain)

Links of interest

Newsletters

International Mathematical Union (IMU) Newsletter - March 2025

Instituto de Ciencias Matemáticas (IC-

MAT) Newsletter - March 2025

International Association of Mathematical Physics Bulletin - January 2025

Entities

European Mathematical Society

Royal Spanish Mathematical Society (RSME)

International Association of Mathematical Physics

International Centre for Theoretical Physics (ICTP)

Association for Women in Mathematics (AWM)

European Research Council

European Commission Funding & Tenders Portal

European Commission - Research and Innovation

International Center of Pure and Applied Mathematics (CIMPA)

Mathematical and physical sciences funding, National Science Foundation, USA

Journals

Geometric Mechanics Journal

Open Access Physics Journals

Open Access Mathematics Journals

Open Access American Institute of Mathematical Sciences (AIMS) Journal

Societat Catalana de Matemàtiques (SCM) journal on Mathematics

Prizes and awards

SIAM Activity Groups award various prizes

Royal Society of London Premier Medals and Awards

International Mathematical Union Awards and Prizes

London Mathematical Society Prizes

Other Prizes of International Mathematical Union

The Shaw Prize

American Mathematical Society Prizes and Awards

The Henri Poincaré Prize

Association for Women in Mathematics Awards

The British Royal Society Grants

IEEE Control Systems Society Awards

The British Royal Society's medals and award

NOTE: If you want to include information in this info-sheet, please send it to gmcactivities@gmail.com