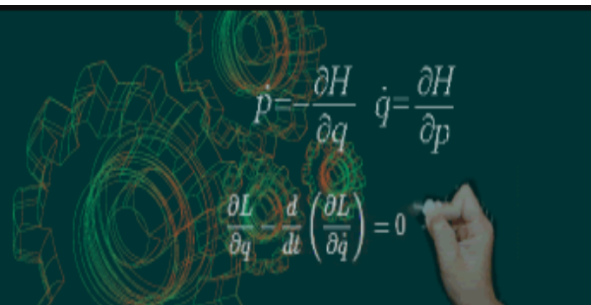




GMC Network



Geometry, Mechanics and Control Network Infosheet

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Editors: Viviana Díaz, Iván
Gutiérrez, Rodrigo Sato

CONTENTS

Network's activities ... 1

Virtual Seminars ... 1

Conferences ... 2

**Job offers, fellowships and
supports**

Master's Scholarships ... 3

Ph.D. offers ... 3

Postdoctoral offers ... 3

Offers for seniors ... 4

Visiting researchers ... 4

Projects and conferences ... 5

Preprints

Network's members ... 5

Network's Collaborators ... 6

Links of interest... 6

Network's activities

Special Session "Geometry, Mechanics, Control and its Interactions" at VI Latin American Congress of Mathematicians (Virtual format).

13–17 September 2021, Montevideo, Uruguay.

Online Seminar of the Geometry, Mechanics and Control Thematic Network.

Instituto de Ciencias Matemáticas' seminars on these topics.

Other virtual seminars

Online Seminar of the Geometry, Mechanics and Control Thematic Network.

Instituto de Ciencias Matemáticas' seminars on these topics.

Online Seminar on Geometry, Dynamics and Mechanics.

A series of online seminars on these topics.

Colloquium on Geometry and Physics.

Online colloquium about interface of the two fields.

One World IAMP Mathematical Physics Seminar.

Seminar of International Association of Mathematical Physics.

Virtual Seminar on Geometry with Symmetries.

On the topic of Lie group actions in Riemannian geometry.

Utrecht Geometry Centre Seminar.

Mathematical Institute, Utrecht University.

Differential Geometry Seminar Torino.

CRM-Montreal, Princeton/IAS, Tel Aviv, and Paris Seminar.

Latin American Seminar on Differential Geometry.

Virtual seminar aims to establish contact with several research groups and mathematicians in Latin America.

ICMAT Geometry Seminar.

Instituto de Ciencias Matemáticas' seminars on algebraic and differential geometry.

Symplectic Zoominar.

Online Seminar organized by University of Torino.

Geometry and Topology Online.

Warwick Mathematics Institute.

Regensburg Low-Dimensional Geometry and

Conferences

Spectra in Riemannian and Symplectic Geometry.

3–14 July 2021, Zanjan, Iran.

Gauge Theory in Geometry and Topology.

5–16 July 2021, Berkeley, USA.

Quantum Fields, Geometry and Representation Theory (Online).

5–23 July 2021, Bengaluru, India.

Online Summer School on Geometry and Topology.

7 July– 6 August 2021, Hradec Králové (Czech Republic) and Novosibirsk (Russia).

Geometry and Topology in Robotics: Learning, Optimization, Planning, and Control.

12–16 July 2021.

SIAM Conference on Control and Its Applications.

19–21 July 2021, Washington, USA.

Mathematical Congress of the Americas 2021 (online).

19–24 July 2021, Buenos Aires, Argentina.

5th Conference on Geometric Science of Information.

21–23 July 2021, Paris, France.

Workshop on Classical and Quantum Integrable Systems.

25–31 July 2021, Sochi, Russia.

Symposium on New Developments in Momentum Polytope Theory (Online).

26–30 July 2021, Madrid, Spain.

Summer School on New Developments in Momentum Polytope Theory.

2– 5 August 2021, Madrid, Spain.

International Congress on Mathematical Physics.

2–7 August 2021, Geneva, Switzerland.

Topology Seminar.

About arithmetic geometry and global analysis.

Theory of Duality Seminar.

Department of Mathematical Methods in Physics, University of Warsaw.

The 3rd International Conference on Symmetry (online).

9–13 August 2021, Negev, Israel.

Mathematical Aspects of General Relativity (hybrid meeting).

29 August – 4 September 2021, Oberwolfach, Germany.

Summer school on Differential Geometry in Mechanics.

5–11 September 2021, Brittany, France.

XXIX International Fall Workshop on Geometry and Physics.

7 – 10 September 2021, Covilhã, Portugal.

Second IMA Conference on Mathematics of Robotics (Online).

8 – 10 September 2021, Manchester, United Kingdom.

Summer School in Mathematical Physics 2020.

13–17 September 2021, Munich, Germany.

The unity of mathematics: A conference in honour of Sir Michael Atiyah.

21–23 September 2021, Cambridge, United Kingdom.

SIAM Conference on Geometric and Physical Modeling.

27–29 September 2021, California, United States.

Quantum Field Theory at the Boundary.

27 September– 8 October 2021, Mainz, Germany.

Differential Geometry, Billiards, and Geometric Optics.

4–8 October 2021, Luminy, France.

Geometric structures and foliations.

18–22 October 2021, Luminy, France.

CIMPA School on Complex Analysis, Geometry and Dynamics.

25 October–6 November 2021, Urgench and Tashkent, Uzbekistan.

International Online Conference on Differential Equations, Control and Optimization.
27–30 October 2021, Istanbul, Turkey.

Hamiltonian Methods and Asymptotic Dynamics.
7–10 December 2021, Providence, USA.

Job offers, fellowships and supports

Master scholarships

Master Scholarships in Quantum Technologies.
Universities in Castilla y León, Spain

Closing date: 9 July 2021.

Ph.D. offers

PhD Position Learning and Control.
University of Groningen, Groningen, Netherlands
Closing date: 5 July 2021.

PhDs in Mathematics.
University of Luxembourg, Luxembourg
Closing date: 31 December 2021.

PhD position in the topology of Hamiltonian systems.
University of Groningen, Groningen, Netherlands
Closing date: 3 August 2021.

PhD in stochastic geometric mechanics.
Wilfrid Laurier University, Waterloo, Canada
Closing date: Open until filled.

PhD position in computational ecology.
Umea University, Umea, Sweden
Closing date: 1 September 2021.

PhD positions.
TU Delft, Delft, The Netherlands
Closing date: Open until filled.

Postdoctoral fellowships

Postdoc in Geometry.
University of Muenster, Muenster, Germany
Closing date: 1 July 2021.

Postdoc position.
Henri Lebesgue Center, Rennes, France
Closing date: 15 October 2021.

Postdoctoral Fellowship.
Georgia Institute of Technology, Atlanta, United States
Closing date: 8 July 2021.

Postdoctoral fellowships in algebraic geometry and mathematical sciences.
Harvard University, Massachusetts, United States
Closing date: Open until filled.

Postdoctoral Positions.
University of Oklahoma, Oklahoma, United States
Closing date: 10 July 2021.

Postdoctoral positions in Mathematics.
Einstein Institute of Mathematics, Jerusalem, Israel
Closing date: Open until filled.

Postdoctoral position in Algebra and Geometry.
University of Vienna, Vienna, Austria
Closing date: 15 July 2021.

Humboldt research fellowship for postdoctoral researchers.
Alexander von Humboldt Foundation
Closing date: Open.

Postdoctoral Fellowship in Applied Mathematics.
University of Waterloo,
Closing date: 30 July 2021.

Lisa Meitner program.
FWF Austrian Science Fund, Vienna, Austria
Closing date: Open.

Postdoc Positions.
University of Bonn, Bonn, Germany
Closing date: 15 October 2021.

Funded postdoctoral fellowship.
University of Reading, United Kingdom
Closing date: Open.

Offers for researchers

Assistant Professor of Mathematics (4 positions).

Centro Universitario de la Defensa, Zaragoza
Closing date: 2 July 2021.

Assistant Professor of Physics (3 positions).

Centro Universitario de la Defensa, Zaragoza
Closing date: 2 July 2021.

Lecturer in Pure Mathematics (3 positions).

King's College London, London, United Kingdom
Closing date: 4 July 2021.

Lecturer in Mathematics.

University of California at Santa Cruz, California, United States
Closing date: 9 July 2021.

Offers for visiting researchers

SAMSI visiting research fellows.

Statistical and Applied Mathematical Sciences Institute, USA.
Applications from junior and senior researchers.
Closing date: Open.

Simons Visiting Professors at Mathematisches Forschungsinstitut Oberwolfach.

Oberwolfach, Germany.
Junior or senior scientists from outside Europe.
Closing date: Open.

Research in pairs at Mathematisches Forschungsinstitut Oberwolfach.

Oberwolfach, Germany.
Between 2 and 4 people, from 2 weeks to 3 months.
Closing date: Six months before planned stay.

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.

Centre International de Rencontres Mathématiques (CIRM).

Tenure Track Assistant Position.

Universidad Nacional Autónoma de México, México
Closing date: 1 August 2021.

Assistant Professor in Mathematics.

University of Texas, Austin, United States
Closing date: 1 August 2021.

Assistant Professor of Mathematics.

Texas A&M University at Qatar, Doha, Qatar
Closing date: 29 September 2021.

Tenure-track Assistant Professor.

California State University, Fresno, United States
Closing date: 1 May 2022.

CIRM, Marseille, France.

2 to 3 researchers for 1 to 2 weeks.
Closing date: Open all year.

Research in pairs program: Centro Internazionale per la Ricerca Matematica.

Fondazione Bruno Kessler, Trento, Italy.
2-3 people from 1 to 6 weeks.
Closing date: Open.

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 Centre de Recerca Matemàtica.

CRM, Catalonia, Spain.
Any time between 6 and 12 months before the start of the desired stay.
Closing date: Open.

Visiting research fellow in Kent State University.

Mathematics Department-KSU, Ohio, USA.
Visiting for scholar researchers.
Closing date: Open.

Financial support for research projects and conferences

Thematic programs at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

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

Hot topics Workshop at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: October 1st., December 1st., and March 1st..

Summer graduate schools at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: October 1st., December 1st., and March 1st..

CIMPA Schools call for proposals.

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

Deadline: 10 October, 2021.

CIMPA Online courses program.

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

Deadline: Open all year.

Support for workshop organization.

Banff International Research Station.

Deadline: No precise deadline.

Proposal of a workshop in the Mathematisches Forschungsinstitut Oberwolfach.

Oberwolfach, Germany.

Deadline: Open.

Mathematical and physical sciences funding.

National Science Foundation, United States of America.

Deadline: No precise deadline.

Hosting a workshop at AIMS South Africa.

Contributions for workshops about AIMS's research focus areas.

Deadline: No precise deadline.

International Mathematical Union - Conference support program.

For conferences in developing or economically disadvantaged countries.

Deadline: Several calls.

Preprints

Network's members

María Barbero Liñán and David Martín de Diego: *Extended retraction maps: a seed of geometric integrators.*

2106.00607

[math.NA, cs.NA, math-ph, math.MP, math.SG]

Florio M. Ciaglia, Fabio Di Cosmo, Alberto Ibort, Giuseppe Marmo, Luca Schiavone and Alessandro Zampini: *A quantum route to the classical Lagrangian formalism.*

2106.00998

[math-ph, math.MP]

Pablo M. Chacón, Antonio Fernández and Pedro L. García: *Discrete Lagrange problems with constraint valued in a Lie group.*

2106.01995

[math.DG]

Manuel de León, Manuel Láinz and Miguel C. Muñoz-Lecanda: *The Herglotz principle and vakonomic dynamics.*

2106.02404

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

Cédric M. Campos, Alejandro Mahillo and David Martín de Diego: *A Discrete Variational Derivation of Accelerated Methods in Optimization.*

2106.02700

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

Iván Gutiérrez-Sagredo and Francisco J. Heranz: *Cayley-Klein Lie bialgebras: Noncommutative spaces, Drinfel'd doubles and kinematical applications.*

2106.03817

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

David Adame-Carrillo, Jordi Gaset and Narciso Román-Roy: *The second-order problem for k -presymplectic Lagrangian field theories. Application to the Einstein-Palatini model.*

2106.06260

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

José F. Cariñena and Manuel F. Rañada: *Jacobi multipliers and Hojman symmetry.*

2106.12310

[math-ph, math.MP]

Network's collaborators

Seokbong Seol, Mathieu Stiénon and Ping Xu: *Dg manifolds, formal exponential maps and homotopy Lie algebras.*

2106.00812 (version 2)

[math.DG, math.AG, math.QA]

Tristan Buckmaster, Theodore D. Drivas, Steve Shkoller and Vlad Vicol: *Simultaneous development of shocks and cusps for 2D Euler with azimuthal symmetry from smooth data.*

2106.02143

[math.AP, math-ph, math.MP, physics.flu-dyn]

Saber Jafarpour, Alexander Davydov, Anton V. Proskurnikov and Francesco Bullo: *Robust Implicit Networks via Non-Euclidean Contractions.*

2106.03194 (version 2)

[cs.LG, cs.SY, eess.SY, math.OC, stat.ML]

Maíra Duran Baldissera, Jaume Llibre and Regilene Oliveira: *Dynamics of a generalized Rayleigh system.*

2106.06100

[math.CA, math.DS]

Timm Faulwasser, Bernhard Maschke, Friedrich Philipp, Manuel Schaller and Karl Worthmann: *Optimal control of port-Hamiltonian descriptor systems with minimal energy supply.*

2106.06571

[math.OC]

Mathieu Anel and Damien Calaque: *Shifted symplectic reduction of derived critical loci.*

2106.06625

[math.AG, math-ph, math.MP, math.SG]

Enrico Facca, Luca Berti, Francesco Fassó and Mario Putti: *Computing the Cut Locus of a Riemannian Manifold via Optimal Transport.*

2106.07510

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

Buddhika Jayawardana, Philip J. Morrison and Tomoki Ohsawa: *Clebsch Anti-Reduction of Lie-Poisson Systems.*

2106.12552

[math-ph, math.MP, physics.class-ph, physics.comp-ph, physics.flu-dyn, physics.plasm-ph]

Giovanni Landi and S. G. Rajeev: *Lie Bi-Algebras on the Non-Commutative Torus.*

2106.11704

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

E. Harikumar, Suman Kumar Panja and Partha Guha: *Regularization of central forces with damping in two and three-dimensions.*

2106.12134

[math-ph, math.MP]

David Martínez Torres: *PDEs from matrices with orthogonal columns.*

2106.13080

[math.DG, math.AP]

Links of interest

Geometry, Mechanics and Control Network

Journal of Geometric Mechanics - March 2021, Volume 13, Issue 1

International Mathematical Union (IMU) Newsletter - May 2021

Instituto de Ciencias Matemáticas (ICMAT) Newsletter - First semester 2021, Number 21

International Association of Mathematical Physics Bulletin - April 2021

European Mathematical Society

Royal Spanish Mathematical Society (RSME)

International Association of Mathematical Physics

Open Access American Institute of Mathematical Sciences (AIMS) Journal

Euraxess Spain

European Research Council

European Commission - Research and Innovation

International Center of Pure and Applied Mathematics (CIMPA)

Open Access Mathematics Journals

Open Access Physics Journals

Societat Catalana de Matemàtiques (SCM)
journal on Mathematics

SIAM Activity Group on Control and Systems Theory Prize

SIAM Activity Group on Control and Systems Theory Best SICON Paper Prize

International Mathematical Union Awards and Prizes

Other Prizes of International Mathematical Union

American Mathematical Society Prizes and Awards

Mathematical Association of America Awards

Association for Women in Mathematics Awards

IEEE Control Systems Society Awards

Royal Society of London Premier Medals and Awards

London Mathematical Society Prizes

The Shaw Prize

The Henri Poincaré Prize

European Mathematical Society Prizes

European Mathematical Society Joint Mathematical Weekend

European Mathematical Society Summer Schools in Mathematics

The Royal Society Grants

The Royal Society's medals and award

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