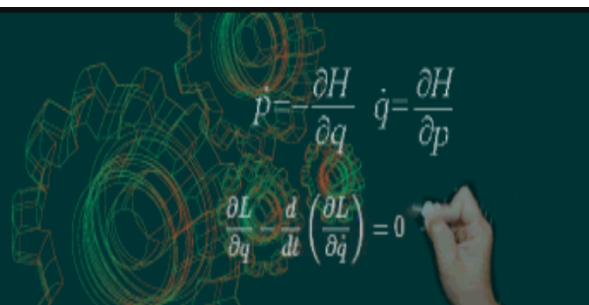




# GMC Network



## *Geometry, Mechanics and Control Network Infosheet*

July 2021

**Editors:** Viviana Díaz, Iván  
Gutiérrez, Rodrigo Sato

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### Network's activities

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

13–17 September 2021, Montevideo, Uruguay.

**XVI Young Researchers Workshop in Geometry, Mechanics and Control (Face-to-face format).**

1–3 December 2021, Barcelona, Spain.

### 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**

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**Conferences**

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**Summer School on New Developments in Momentum Polytope Theory.**

2–5 August 2021, Madrid, Spain.

**Nijenhuis Geometry and Applications (Online conference).**

2–3 August 2021, Jena, Germany.

**International Congress on Mathematical Physics.**

2–7 August 2021, Geneva, Switzerland.

**7th International Conference on Physics (webinar).**

9–10 August 2021, Zurich, Switzerland.

**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.

**Topology Seminar.**

About arithmetic geometry and global analysis.

**Theory of Duality Seminar.**

Department of Mathematical Methods in Physics, University of Warsaw.

**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.

**Quantum trajectories fall school.**

18–22 October 2021, Toulouse, 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.

**8th International Conference on Theoretical and Applied Physics.**

15–16 November 2021, Madrid, Spain.

**Hamiltonian Methods and Asymptotic Dynamics.**

7–10 December 2021, Providence, USA.

**Lie Theory and Poisson Geometry Conference.**

10–14 January 2022, Luminy, France.

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**Job offers, fellowships and supports**

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## Ph.D. offers

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### PhD position in the topology of Hamiltonian systems.

University of Groningen, Groningen, Netherlands  
Closing date: 3 August 2021.

### PhD in holomorphic dynamics and orthogonal polynomials.

Roskilde University, Roskilde, Denmark  
Closing date: 30 August 2021.

### PhD position in computational ecology.

Umea University, Umea, Sweden  
Closing date: 1 September 2021.

### PhD position in Combinatorial Optimization

## Postdoctoral fellowships

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### Two-year postdoctoral position.

Institute of Mathematics, Czech Academy of Sciences, Czech Republic  
Closing date: 15 August 2021.

### Research Associate in Representation Theory.

University of Bath, Bath, United Kingdom  
Closing date: 16 August 2021.

### Researcher in mathematical genetics.

Bielefeld University, Bielefeld, Germany  
Closing date: 19 August 2021.

### Postdoctoral position.

Institute of Mathematics, Czech Academy of Sciences, Czech Republic  
Closing date: 5 September 2021.

### Postdoctoral position in Complex and Symplectic Geometry.

Universita di Firenze, Florence, Italy  
Closing date: 4 October 2021.

### Postdoc Positions.

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

## Offers for researchers

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### 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

### with Uncertainty.

University of Twente, Enschede, Netherlands  
Closing date: 13 September 2021.

### PhDs in Mathematics.

University of Luxembourg, Luxembourg  
Closing date: 31 December 2021.

### PhD in stochastic geometric mechanics.

Wilfrid Laurier University, Waterloo, Canada  
Closing date: Open until filled.

### PhD positions.

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

### Postdoc position.

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

### Postdoctoral fellowships in algebraic geometry and mathematical sciences.

Harvard University, Massachusetts, United States  
Closing date: Open until filled.

### Postdoctoral positions in Mathematics.

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

### Humboldt research fellowship for postdoctoral researchers.

Alexander von Humboldt Foundation  
Closing date: Open.

### Lisa Meitner program.

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

### Funded postdoctoral fellowship.

University of Reading, United Kingdom  
Closing date: Open.

Closing date: 1 August 2021.

### University Teacher in Mathematical Sciences.

University of Liverpool, Liverpool, United Kingdom  
Closing date: 4 August 2021.

### Profesor Titular de Universidad (Matemática

**Aplicada).**

Universidad Politécnica de Madrid, Madrid, Spain  
 Closing date: 5 August 2021.

**Lecturer in Mathematics.**

Purdue University, Indiana, United States  
 Closing date: 16 August 2021.

**Lecturer in Actuarial Mathematics.**

University of Liverpool, Liverpool, United Kingdom  
 Closing date: 18 August 2021.

**Lecturer in Applied Mathematics.**

University of Bristol, Bristol, United Kingdom  
 Closing date: 1 September 2021.

**Offers for visiting researchers**

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**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).****Faculty positions in Applied Mathematics.**

Universidad Adolfo Ibáñez, Santiago, Chile  
 Closing date: 15 September 2021.

**Chair in Mathematics.**

University of Bristol, Bristol, United Kingdom  
 Closing date: 24 September 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**

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**Thematic programs at MSRI.**

Mathematical Sciences Research Institute, Berkeley, United States.  
 Deadline: October 1st., December 1st., and March 1st. Three years ahead.

Mathematical Sciences Research Institute, Berkeley, United States.

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

**Hot topics Workshop at MSRI.****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**

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### **Network's members**

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S. Hajdú and T. Mestdag: *Nonlinear splittings on fibre bundles.*

2107.00428

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

G. E. Prince, M. Farré Puiggali, D. J. Saunders and D. Martín de Diego: *Linear connections and shape maps for second order ODEs with and without constraints.*

2107.02309

[math.DG]

Jordi Gaset and Narciso Román-Roy: *Symmetries and gauge symmetries in multisymplectic first and second-order Lagrangian field theories: electromagnetic and gravitational fields.*

2107.08846

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

Robert Cardona, Eva Miranda and Daniel Peralta-Salas: *Looking at Euler flows through a contact mirror: Universality and undecidability.*

2107.09471

[math.AP, cs.CC, math.DS, math.SG]

### **Network's collaborators**

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Henrique Bursztyn, Alejandro Cabrera and Matías del Hoyo: *Poisson double structures.*

2106.15403

[math.SG, math.DG]

Daniel Adrián Maldonado, Emil Constantinescu, Hong Zhang, Vishwas Rao and Mihai Anitescu: *Trust-region approximation of extreme trajectories in power system dynamics.*

2106.16132

[math.OC]

Rui Loja Fernandes and Ivan Struchiner: *The Classifying Lie Algebroid of a Geometric Structure II: G-structures with connection.*

2107.01193

[math.DG]

Andronikos Paliathanasis and P. G. L. Leach: *Symmetry analysis for the 2 + 1 generalized quantum Zakharov-Kuznetsov equation.*

2107.01647

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

Tagir Farkhutdinov, François Gay-Balmaz and Vakhtang Putkaradze: *Actively deforming porous media in an incompressible fluid: a variational approach.*

2107.03661

[physics.flu-dyn, math.DS, nlin.CD]

David J. Fernández C. and Rosa Reyes: *Spectral manipulation of the trigonometric Rosen-Morse potential through supersymmetry.*

2107.00232

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

Arturo Ramos: *Infinite families of shape invariant potentials with  $n$  parameters subject to translation.*  
2107.08306  
[quant-ph, hep-th, math-ph, math.MP]

Karl-Hermann Neeb and Gestur Olafsson: *Wedge domains in compactly causal symmetric spaces.*  
2107.13288  
[math.RT, math-ph, math.MP]

## Links of interest

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**Geometry, Mechanics and Control Network**

**Journal of Geometric Mechanics - June 2021, Volume 13, Issue 2**

**International Mathematical Union (IMU) Newsletter - July 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](mailto:gmactivities@gmail.com)**