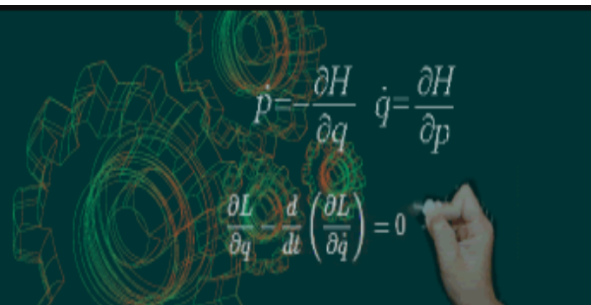




# GMC Network



## *Geometry, Mechanics and Control Network Infosheet*

October 2021

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### Network's activities

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

1–3 December 2021, Barcelona, Spain.

**VII Iberoamerican Meeting on Geometry, Mechanics and Control (Virtual format).**

9–11 March 2022, Bahía Blanca, Argentina.

### 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**

### **Topology Seminar.**

About arithmetic geometry and global analysis.

### **Theory of Duality Seminar.**

Department of Mathematical Methods in Physics,  
University of Warsaw.

## **Conferences**

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

15–16 November 2021, Madrid, Spain.

### **Hamiltonian Methods and Asymptotic Dynamics.**

6–10 December 2021, Providence, USA.

### **Noncommutative Geometry and Applications.**

13–17 December 2021, Sochi, Russia.

### **Lie Theory and Poisson Geometry Conference.**

10–14 January 2022, Luminy, France.

### **Introductory Workshop on Tame Geometry, Transseries and Applications to Analysis and Geometry.**

10–14 January 2022, Toronto, Canada.

### **12th International Conference on Applied Physics and Mathematics.**

18–20 February 2022, Singapore.

### **Interactions of gauge theory with contact and symplectic topology in dimensions 3 and 4.**

6–11 March 2022, Banff, Canada.

## **Job offers, fellowships and supports**

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### **Ph.D. offers**

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#### **Doctoral Positions in Mathematics.**

University of Münster, Münster, Germany

Closing date: 1 November 2021.

#### **PhD position in computational methods for wave phenomena.**

Umeå University, Umeå, Sweden

Closing date: 1 November 2021.

#### **PhD student positions.**

University of Duisburg-Essen, Essen, Germany

Closing date: 19 November 2021.

#### **Doctoral researcher position.**

University of Bremen, Bremen, Germany

Closing date: 30 November 2021.

#### **PhD positions in Mathematics.**

Berlin Mathematical School, Berlin, Germany

Closing date: 1 December 2021.

#### **Doctoral Researcher .**

TUM, München, Germany

Closing date: 30 December 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.

## **Postdoctoral fellowships**

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#### **Postdoctoral Positions in Mathematics.**

University of Münster, Münster, Germany

Closing date: 1 November 2021.

#### **Research Position.**

University of Bielefeld, Bielefeld, Germany

Closing date: 3 November 2021.

#### **Postdoctoral Research Fellow.**

Carnegie Mellon University, Pittsburgh, United States

Closing date: 15 November 2021.

**Postdoc positions in mathematics.**

IHES, Bures-sur-Yvette, France

Closing date: 30 November 2021.

**Postdoc in computational mathematics.**

University of Coimbra, Coimbra, Portugal

Closing date: 30 November 2021.

**Postdoctoral Fellowships.**

Mathematical Sciences Research Institute, California, United States

Closing date: 1 December 2021.

**Simons Postdoctoral Fellowships.**

United States

Closing date: 1 December 2021.

**Postdoctoral Researcher .**

TUM, München, Germany

Closing date: 30 December 2021.

**Postdoc in Ergodic Theory and Dynamical Systems.**

University of Zurich, Zurich, Switzerland

Closing date: 7 January 2022.

**Offers for researchers**

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**University Assistant.**

University of Graz, Graz, Austria

Closing date: 24 November 2021.

**Senior Researcher Positions.**

IBS Center for Geometry and Physics, Pohang, South Korea

Closing date: 29 November 2021.

**Assistant Professor in Pure and Applied Mathematics.**

Massachusetts Institute of Technology, Massachusetts, USA

Closing date: 1 December 2021.

**Offers for visiting researchers**

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**Research Memberships at MSRI.**

Mathematical Sciences Research Institute, USA.

Researchers who will be in residence for at least 30 consecutive days.

Closing date: December, 1st..

**SAMSI visiting research fellows.**

Statistical and Applied Mathematical Sciences Institute, USA.

Applications from junior and senior researchers.

**Post-doctoral position in PDEs with randomness.**

Sorbonne Université, Paris, France

Closing date: 31 January 2022.

**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.

**Assistant Professor in Mathematics.**

University of Texas, Austin, USA

Closing date: 1 December 2021.

**Full Professorship for Pure Mathematics.**

University of Freiburg, Freiburg, Germany

Closing date: 12 December 2021.

**Tenure-track Position in Mathematics.**

NYU Shanghai, Shanghai, China

Closing date: 22 December 2021.

**Tenure-track Assistant Professor.**

California State University, Fresno, United States

Closing date: 1 May 2022.

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).**  
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.**

## **Financial support for research projects and conferences**

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**Thematic programs at MSRI.**  
Mathematical Sciences Research Institute, Berkeley, United States.  
**Deadline:** 1 December, 1 March, and 1 de October.  
Three years ahead.

**Hot topics Workshop at MSRI.**  
Mathematical Sciences Research Institute, Berkeley, United States.  
**Deadline:** 1 December, 1 March, and 1 de October..

**Summer graduate schools at MSRI.**  
Mathematical Sciences Research Institute, Berkeley, United States.  
**Deadline:** 1 December, 1 March, and 1 de October..

**Summer research in mathematics program at MSRI.**  
Mathematical Sciences Research Institute, Berkeley, United States.  
**Deadline:** December 1st..

**IAMP supported conferences.**  
International Association of Mathematical Physics.  
**Deadline:** January 1st..

**CIMPA Online courses program.**

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.

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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Manuel de León, Jordi Gaset and Manuel Laínz Valcázar: *Inverse problem and equivalent contact systems.*

2110.04815

[math-ph, math.MP]

Ángel Ballesteros, Giulia Gubitosi and Flavio Mercati: *Interplay between spacetime curvature, speed of light and quantum deformations of relativistic symmetries.*

2110.04867

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

Stephane Geudens, Alfonso G. Tortorella and Marco Zambon: *Deformations of Symplectic Foliations.*

2110.05298

[math.SG, math.DG]

Miguel Á. Berbel and M. Castrillón López: *Rigid Body with Rotors and Reduction by Stages.*

2110.11081

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

Manuel de León, Manuel Laínz Valcázar and Asier López Gordón: *Discrete Hamilton-Jacobi theory for systems with external forces.*

2110.14431 (version 2)

[math-ph, cs.NA, math.MP, math.NA, physics.class-ph]

### Network's collaborators

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Yamile Godoy, Michael Harrison and Marcos Salvai: *Outer billiards on the manifolds of oriented geodesics of the three dimensional space forms.*

2110.01679

[math.DS, math.DG]

Francesco Bullo, Pedro Cisneros-Velarde, Alexander Davydov and Saber Jafarpour: *From Contraction Theory to Fixed Point Algorithms on Riemannian and Non-Euclidean Spaces.*

2110.03623

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

Ugo Boscain, Daniele Cannarsa, Valentina Franceschi and Mario Sigalotti: *Local controllability does imply global controllability.*

2110.06631 (version 2)

[math.OC, math.DS]

Francisco Correa, Andreas Fring and Takanobu Taira: *Linearly stable and unstable complex soliton solutions with real energies in the Bullough-Dodd model.*

2110.06825

[nlin.SI, hep-th, math-ph, math.MP, quant-ph]

G. E. Prince and D. J. Saunders: *Covariant derivatives for Ehresmann connections.*

2110.07242

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

Alexander Davydov, Anton V. Proskurnikov and Francesco Bullo: *Non-Euclidean Contractivity of Recurrent Neural Networks.*

2110.08298

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

Francisco Ferraris, Ruth Paola Moas and Marcos Salvai: *Harmonic unit normal sections of Grassmannians associated with cross products.*

2110.09611

[math.DG]

Partha Guha and Sudip Garai: *Relativistic formulation of curl force, relativistic Kapitza equation and trapping.*

2110.09853

[math-ph, math.MP]

Vladimir Dragovic, Borislav Gajic and Bozidar Jovanovic: *Gyroscopic Chaplygin systems and integrable magnetic flows on spheres.*

2110.09938

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

Dishant M. Pancholi and Francisco Presas: *Symplectic embeddings of 4-manifolds via Lefschetz fibrations.*

2110.12950

[math.GT, math.SG]

S. Gherseen, V. Kozlov and U. Wennergren: *Effects of density dependence, partial cross immunity and non-linear incidences on coinfection dynamics.*

2110.14386

[q-bio.PE, math.DS]

## Links of interest

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Geometry, Mechanics and Control Network

Journal of Geometric Mechanics - September 2021, Volume 13, Issue 3

International Mathematical Union (IMU) Newsletter - September 2021

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

International Association of Mathematical Physics Bulletin - July 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 Funding and Sponsorship

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)