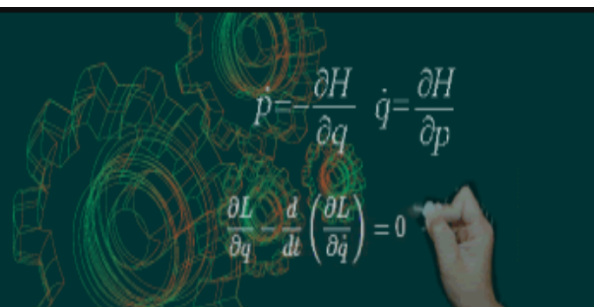




GMC Network



Geometry, Mechanics and Control Network Infosheet

November 2021

Editors: Viviana Díaz, Iván
Gutiérrez, Rodrigo Sato

CONTENTS

Network's activities ...	1
Virtual Seminars ...	1
Conferences ...	2
Job offers, fellowships and supports	
Ph.D. offers ...	2
Postdoctoral offers ...	3
Offers for seniors ...	3
Visiting researchers ...	4
Projects and conferences ...	4
Preprints	
Network's members ...	5
Network's Collaborators ...	5
Links of interest ...	6

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.

Control and Optimization Seminar.

Louisiana State University.

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

Hamiltonian Methods and Asymptotic Dynamics.

6–10 December 2021, Providence, USA.

60th Conference on Decision and Control.

13–17 December 2021, Austin, 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.

Calculus of Variations in Probability and Geometry.

7–11 February 2022, Los Angeles, USA.

12th International Conference on Applied Physics and Mathematics.

18–20 February 2022, Singapore.

Geometric Structures in Group Theory.

27 February –5 March 2022, Oberwolfach, Germany.

Differential Geometry and Integrable Systems.

1–21 March 2022, Osaka, Japan.

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

6–11 March 2022, Banff, Canada.

Advancing Quantum Mechanics with Mathematics and Statistics.

7 March–10 June 2022, Los Angeles, USA.

Recent Development in Representation Theory and Mathematical Physics.

20 – 26 March 2022, Oberwolfach, Germany.

Geometry and Analysis on Non-Compact Manifolds.

28 March – 1 April 2022, Luminy, France.

Multiscale Approaches in Quantum Mechanics.

28 March – 1 April 2022, Los Angeles, USA.

Symplectic singularities in geometry and representation theory.

4 – 8 April 2022, Luminy, France.

Model Reduction in Quantum Mechanics.

11 – 15 April 2022, Los Angeles, USA.

Large-Scale Certified Numerical Methods in Quantum Mechanics.

2 – 6 May 2022, Los Angeles, USA.

Monte Carlo and Machine Learning Approaches in Quantum Mechanics.

23 – 27 May 2022, Los Angeles, USA.

Job offers, fellowships and supports

Ph.D. offers

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.

Several PhD scholarships.

University of Göttingen, Göttingen, Germany

Closing date: 1 February 2022.

PhD position in Algorithms.

Technical University of Munich, Munich, Germany

Closing date: 27 February 2022.

Ph.D. Studentship in Numerical Analysis.

Postdoctoral fellowships

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 Fellow on Applied Inverse Methods.

BCAM, Bilbao, Spain

Closing date: 10 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.

Postdoc in Mathematical Analysis of PDEs.

Delft University of Technology, Delft, Netherlands

Closing date: 9 January 2022.

Postdoctoral Fellowship in Special Functions and Random Walks.

BCAM, Bilbao, Spain

Closing date: 17 January 2022.

Offers for researchers

Assistant Professor in Pure and Applied Mathematics.

Massachusetts Institute of Technology, Massachusetts, USA

Closing date: 1 December 2021.

Assistant Professor in Mathematics.

University of Texas, Austin, USA

Closing date: 1 December 2021.

Charles University, Prague, Czech Republic

Closing date: 7 March 2022.

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.

Post-doctoral position in PDEs with randomness.

Sorbonne Université, Paris, France

Closing date: 31 January 2022.

Postdoctoral Research Scientist in Numerical Analysis.

Charles University, Prague, Czech Republic

Closing date: 7 March 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.

Full Professorship for Pure Mathematics.

University of Freiburg, Freiburg, Germany

Closing date: 12 December 2021.

Mathematics Professor.

New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Closing date: 15 December 2021.

Tenure-track Position in Mathematics.

NYU Shanghai, Shanghai, China

Closing date: 22 December 2021.

Associate Professor of Complex Systems.

University Of Oxford, Oxford, United Kingdom

Closing date: 4 January 2022.

Assistant Professor in Mathematics.

Delft University of Technology, Delft, Netherlands

Closing date: 10 January 2022.

Tenure-track Assistant Professor.

California State University, Fresno, United States

Closing date: 1 May 2022.

Offers for visiting researchers

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.

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.

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: 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.

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

Jacob R. Goodman, Juan S. Cely, Thomas Beckers and Leonardo J. Colombo: *Geometric Control for Load Transportation with Quadrotor UAVs by Elastic Cables.*

2111.00777

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

Robert Cardona, Eva Miranda and Daniel Peralta-Salas: *Computability and Beltrami fields in Euclidean space.*

2111.03559 (version 2)

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

S. Hajdu and T. Mestdag: *Homogeneous nonlinear splittings and Finsler submersions.*

2111.04411

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

Florio M. Ciaglia, Fabio Di Cosmo, Alberto Ibort, Giuseppe Marmo, Luca Schiavone and Alessandro Zampini: *Symmetries and Covariant Poisson brackets on pre-symplectic manifolds.*

2111.13066

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

Network's collaborators

Antonio Linero Bas and Daniel Nieves Roldán: *Periods of a max-type equation.*

2111.01651

[math.DS]

Benoît Bonnet, Nastassia Pouradier Duteil and Mario Sigalotti: *Consensus Formation in First-Order Graphon Models with Time-Varying Topologies.*

2111.03900

[math.OC, math.FA]

Alessandro Arsie, Paolo Lorenzoni, Igor Mencattini and Guglielmo Moroni: *A Dubrovin-Frobenius manifold structure of NLS type on the orbit space of B_n .*

2111.03964

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

2111.05782

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

Javier Fernández, Mariana Juchani and Marcela Zuccalli: *Discrete connections on principal bundles: the Discrete Atiyah Sequence.*

2111.06843

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

Fabao Gao and Jaume Llibre: *Global dynamics of the Horava-Lifshitz cosmology in the presence of non-zero cosmological constant in a flat space.*

2111.08377

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

Giovanni Bazzoni, Antonio Garvín and Vicente Muñoz: *Purely coclosed G_2 -structures on nilmanifolds.*

2111.08399

[math.DG, math.AT]

Simonetta Abenda and Petr G. Grinevich: *Geometric nature of relations on plabic graphs and totally non-negative Grassmannians.*

Links of interest

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 - October 2021

European Mathematical Society

Royal Spanish Mathematical Society
(RSME)

International Association of Mathematical
Physics

Open Access American Institute of Mathe-
matical Sciences (AIMS) Journal

Euraxess Spain

European Research Council

European Commission - Research and Inno-
vation

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 Sys-
tems Theory Prize

SIAM Activity Group on Control and Sys-
tems 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 Poincarè 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