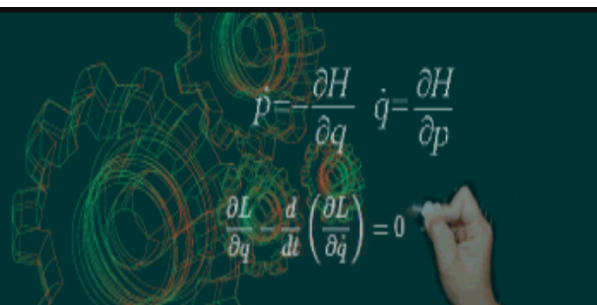




GMC Network



Geometry, Mechanics and Control Network Infosheet

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CONTENTS

Network's activities ...	1
Outstanding event ...	1
Virtual Seminars ...	1
Conferences ...	1
Job offers, fellowships and supports	
Ph.D. offers ...	2
Postdoctoral offers ...	2
Offers for seniors ...	3
Visiting researchers ...	3
Support for research projects and conferences ...	4
Interesting news and publications	
Journal ...	5
Preprints	
Network's members ...	5
Network's Collaborators ...	5
Links of interest ...	6

Network's activities

15th International Young Researchers Workshop on Geometry, Mechanics, and Control (Online).
30 November–4 December 2020, Utrecht, The Netherlands.

Outstanding event

Online Seminar on Geometry, Dynamics and Mechanics.
A series of online seminars on these topics.

Virtual seminars

Western Hemisphere Colloquium on Geometry and Physics.

Online colloquium about current research on topics in the interface of the two fields.

One World IAMP Mathematical Physics Seminar.

Online Seminar of International Association of Mathematical Physics.

Virtual Seminar on Geometry with Symmetries.

Virtual research seminar on the topic of "Lie group actions in Riemannian geometry".

Utrecht Geometry Centre Seminar.

Mathematical Institute, Utrecht University.

Geometry and Topology Online.

Warwick Mathematics Institute.

Regensburg Low-Dimensional Geometry and Topology Seminar.

Virtual seminar about interactions between arithmetic geometry and global analysis.

Conferences

The 1st International Conference on Contemporary Problems of Physics and Mathematics with Applications.
4–6 September 2020, Baku, Azerbaijan.

Summer School on Méthodes Probabilistes et Stochastiques en Mécanique.

6 – 12 September 2020, Quiberon, France.

Women in Mathematical Physics.

20–25 September 2020, Alberta, Canada.

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

22–24 September 2020, Cambridge, United Kingdom.

Foliation Theory and Complex Geometry.

23–27 November 2020, Luminy, France.

5th International Conference on Quantum Physics and Mechanics (Webinar).

25–27 November 2020, Edinburgh, United Kingdom.

59th Conference on Decision and Control (virtual format).

8–11 December 2020, Jeju Island, Korea.

Quantum Groups and Cohomology Theory of Quiver and Flag Varieties.

14–18 December 2020, Luminy, France.

Geometry, Dynamics and Spectrum of Operators on Discrete Spaces.

3–9 January 2021, Oberwolfach, Germany.

Topics at the Interface of Low Dimensional Group Actions and Geometric Structures.

4–15 January 2021, Singapore.

Geometry, Topology and their Applications in Control System Design.

21–26 February 2021, Banff, Canada.

Job offers, fellowships and supports

Ph.D. offers

PhD in Geometric Computing.

University of Cagliari, Cagliari, Italy

Closing date: 21 September 2020.

PhD Positions in Numerical Analysis.

Charles University, Prague, Czech Republic

Closing date: 9 November 2020.

Doctoral researcher in applied mathematics.

Technical University Munich, Munich, Germany

Closing date: 30 November 2020.

PhD Positions in Mathematics.

Aachen University, Aachen, Germany

Closing date: 31 December 2020.

PhD positions.

TU Delft, Delft, The Netherlands

Closing date: Open until filled.

Doctoral candidate (PhD student) in the Systems Control Group.

University of Luxembourg, Luxembourg

Closing date: Open until filled.

Open PhD Positions in Geometry.

Max Planck Institute For Informatics, Saarbrücken, Germany

Closing date: Open until filled.

Doctoral candidate in applied algebraic geometry.

Aalto University, Espoo, Finland

Closing date: Open until filled.

Postdoctoral fellowships

Postdoctoral Associate in Mathematics.

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

Closing date: 1 September 2020.

Postdoctoral researcher in Dynamical Systems.

University of Rijeka, Rijeka, Croatia

Closing date: 14 September 2020.

ICMAT postdoc SO 2021.

ICMAT, Madrid, Spain

Closing date: 15 September 2020.

La Laguna postdocs.

University of La Laguna, Tenerife, Spain

Closing date: 15 September 2020.

Postdoctoral researcher.

Technical University Munich, Munich, Germany

Closing date: 30 September 2020.

Postdoc Position in Numerical Analysis.

Charles University, Prague, Czech Republic

Closing date: 9 November 2020.

Postdoctoral positions in geometry.

Heidelberg University, Germany

Closing date: Open until filled.

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.

Offers for researchers

Professor of Mathematics.

University of Padova, Padova, Italy

Closing date: 20 September 2020.

Tenure-track assistant professor in pure mathematics.

KU Leuven, Kortrijk

Closing date: 30 September 2020.

6 Academic Positions.

Ghent University, Gent, Belgium

Closing date: 1 October 2020.

Research Professor in Mathematics.

Beijing Institute of Mathematical Sciences and Applications, Beijing, China

Closing date: Open until filled.

Differential geometry expert.

Barcelona, Spain.

Mail to: mcastellano@talentocientifico.com.

Closing date: Open until filled.

Offers for visiting researchers

Research Professorships at MSRI.Mathematical Sciences Research Institute, USA.
Distinguished researchers including mentoring of postdoctoral fellows, minimum of three months.

Closing date: 1st October, 2020.

Research Members at MSRI.Mathematical Sciences Research Institute, USA.
Mathematicians with Ph.D.s, at least 30 days.

Closing date: 1st December, 2020.

Research scientist in Mathematics.

Massachusetts Institute of Technology, Massachusetts, United States

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.

Several Tenure Track positions.

TU Delft, Delft, The Netherlands

Closing date: Open until filled.

Assistant professor in Mathematics.

Deusto University, Bilbao, Spain

Closing date: Open until filled.

Mathematics adjunct instructors.

Portland State University, Oregon, United States

Closing date: Open until filled.

Tenure track position in geometry.

McMaster University, Ontario, Canada

Closing date: Open until filled.

Tenure track positions in Mathematics.

University of Texas at Dallas, United States

Closing date: Open until filled.

Assistant professor in Mathematics.

Embry-Riddle Aeronautical University at Prescott, Arizona, United States

Closing date: Open until filled.

Postdoctoral Fellows at MSRI.Mathematical Sciences Research Institute, USA.
Ph.D. in mathematics no more than 5 years prior.

Closing date: 1st December, 2020.

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.

Financial support for research projects and conferences

Individual Fellowships 2020.

European Commission.

Deadline: 9 September 2020.

Call for projects of CIMPA Schools 2022.

Research schools in emerging countries.

Deadline: 18 September 2020.

Co-funding of regional, national and international programmes 2020.

European Commission.

Deadline: 29 September 2020.

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.

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.

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

IAMP Supported Conferences.

International Association of Mathematical Physics.

Deadline: October 15.

CIMPA 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 dis-

advantaged countries.

Deadline: Several calls.

Interesting news and publications

Journal

Special Issue "New Trends in Hamilton-Jacobi Theory: Conservative and Dissipative Dynamics".

Guest Editor: Manuel de León.

Publisher: MDPI.

Deadline for submissions: 30 November 2020.

https://www.mdpi.com/journal/mathematics/special_issues/New_Trends_Hamilton-Jacobi_Theory_Conservative_Dissipative_Dynamics

Preprints

Network's members

Miguel Á. Berbel and Marco Castrillón López: *Lagrangian Reduction by Stages in Field Theory*.

2007.14854

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

Ángel Ballesteros, Alfonso Blasco and Iván Gutiérrez-Sagredo: *Exact closed-form solution of a modified SIR model*.

2007.16069

[q-bio.PE, math.DS, physics.soc-ph]

Juan Margalef-Bentabol and Eduardo J. S. Villaseñor: *Geometric formulation of the Covariant Phase Space methods with boundaries*.

2008.01842

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

Oğul Esen, Eduardo Fernández-Saiz, Cristina

Sardón and Marcin Zając: *Geometry and solutions of an epidemic SIS model permitting fluctuations and quantization*.

2008.02484

[q-bio.PE, math-ph, math.MP, physics.soc-ph]

Luis C. García-Naranjo and Mats Vermeeren: *Structure preserving discretization of time-reparametrized Hamiltonian systems with application to nonholonomic mechanics*.

2008.07222

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

Iakovos Androulidakis and Marco Zambon: *Integration of Singular Subalgebroids*.

2008.07976

[math.DG]

Network's collaborators

Xiaoqian Gong, Benedetto Piccoli and Giuseppe Visconti: *Mean-field limit of a hybrid system for multi-lane multi-class traffic*.

2007.14655

[math.AP, math.DS, math.OC, physics.soc-ph]

Karl-Hermann Neeb, Bent Ørsted and Gestur Olafsson: *Standard subspaces of Hilbert spaces of holomorphic functions on tube domains*.

2007.14797

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

Andreas Fring and Takanobu Taira: *Complex BPS solitons with real energies from duality*.

2007.15425

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

María Ángeles García-Ferrero, David Gómez-Ullate and Robert Milson: *Exceptional Legendre polynomials via isospectral deformation and confluent Darboux transformations*.

2008.02822 (version 2)

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

Alejandro Cabrera and Cristian Ortíz: *Quotients of multiplicative forms and Poisson reduction*.

2008.03416

[math.DG, math.SG]

Kumar Abhinav, Indranil Mukherjee and Partha Guha: *Non-holonomic and Quasi-integrable deformations of the AB Equation*.

2008.05775 (version 2)

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

Felisia Angela Chiarello, Benedetto Piccoli and Andrea Tosin: *Multiscale control of generic second order traffic models by driver-assist vehicles.*

2008.07439

[physics.soc-ph, math.OC, nlin.AO]

Jaume Llibre, Bruno Dominiciano Lopes and Paulo Ricardo da Silva: *Phase Portrait of the Riccati Quadratic Polynomial Differential Systems.*

2008.07597

[math.DS]

Matteo Petrera, Yuri B. Suris, Kangning Wei and Rene Zander: *Manin involutions for elliptic pencils and discrete integrable systems.*

2008.08308

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

Xiaoming Duan and Francesco Bullo: *Markov Chain-Based Stochastic Strategies for Robotic Surveillance.*

2008.09050

[math.OC, cs.RO]

Marko Berghoff and Dirk Kreimer: *Graph complexes and Feynman rules.*

2008.09540

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

Elizabeth Y. Huang, Dario Paccagnan, Wenjun Mei and Francesco Bullo: *Assign and Appraise: Achieving Optimal Performance in Collaborative Teams.*

2008.09817

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

J. Andersson, S. Gherseen, V. Kozlov, V. Tkachev and U. Wennergren: *Effect of density dependence on coinfection dynamics.*

2008.09987

[math.DS]

Janusz Grabowski and Zohreh Ravanpak: *Discrete mechanics on unitary octonions.*

2008.10971

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

Giuseppe Marmo and Alessandro Zampini: *Abstract Dynamical Systems: Remarks on Symmetries and Reduction.*

2008.11692

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

Links of interest

Geometry, Mechanics and Control Network

Journal of Geometric Mechanics - June 2020, Volume 12, Issue 2

International Mathematical Union (IMU) Newsletter - July/August 2020, Net 102

Instituto de Ciencias Matemáticas (ICMAT) Newsletter - Second semester 2020, Number 20

International Association of Mathematical Physics Bulletin - July 2020

European Mathematical Society

Royal Spanish Mathematical Society (RSME)

International Association of Mathematical Physics

Research Webinars Around the World (Several topics)

Latin American Cyber Colloquium on Mathematics

Open Access American Institute of Mathematical Sciences (AIMS) Journal

Euraxess Spain

European Research Council

International Cooperation “Open to the World”

International Center of Pure and Applied Mathematics (CIMPA)

Mathematics in Spain

Open Access Mathematics Journals

Open Access Physics Journals

Societat Catalana de Matemàtiques (SCM) journal on Mathematics

Mathematics in Europe

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

Fermat Prize

Society for Industrial and Applied Mathematics Prizes

Noether Lectures Award

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 gmccactivities@gmail.com