

# GMC Network Infosheet

July 2018



## Geometry, Mechanics and Control Network Infosheet

July 2018

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## Network's activities

### VI Iberoamerican Meeting on Geometry, Mechanics and Control.

13–17 August 2018, Guanajuato, Mexico.

<http://gmc.eventos.cimat.mx/node/760>

### XIII International Young Researchers Workshop on Geometry, Mechanics and Control.

6–8 December 2018, Coimbra, Portugal.

<http://www.uc.pt/en/congressos/13yrw>

### Special Session “Poisson Geometry and Mathematical Physics” at II Joint Meeting of Mathematical Societies RSME-SEMA-SBM-SBMAC.

11–14 December 2018, Cádiz, Spain.

<http://spabrazmathcadiz18.uca.es/web/Congreso/?lang=en&page=especiales>

### Special Session “Estructuras geométricas aplicadas a mecánica clásica, teoría de control e ingeniería” at Congreso Bienal de la Real Sociedad Matemática Española.

4–8 February 2019, Santander, Spain.

<http://2019.bienalrsme.com/sesiones-especiales>

## Other Conferences

### International Congress of Mathematicians.

1–9 August 2018, Rio de Janeiro, Brazil.

<http://www.icm2018.org/portal/en/home/>

### National Conference on Differential Geometry and its Applications.

3–5 August 2018, Allahabad Uttar Pradesh, India.

<http://www.ngbu.edu.in/newsite/index.php?PageURL=DGACON>

### Mathematical General Relativity.

5–11 August 2018, Oberwolfach, Germany.

<https://www.mfo.de/www/schedule/2018/all>

### Hamiltonian Systems, from Topology to Applications through Analysis.

13 August–14 December 2018, Berkeley, California, USA.

<http://www.msri.org/programs/305>

**Mid Year School on Analysis, Geometry, and Applications.**

13 August–18 August 2018, Bandung, Indonesia.  
<http://personal.fmipa.itb.ac.id/hgunawan/mysaga-2018/>

**Advances in Statistical Mechanics.**

27–31 August 2018, Marseille Luminy, France.  
<https://conferences.cirm-math.fr/1855.html>

**XXVII International Fall Workshop on Geometry and Physics.**

3–7 September 2018, Sevilla, Spain.  
<http://congreso.us.es/ifwgp/>

**Workshop on multisymplectic geometry and applications.**

6–8 September 2018, Metz, France.  
<http://www.iecl.univ-lorraine.fr/~Camille.Laurent-Gengoux/ConfGEMS/programmeGEMS.html>

**INdAM Workshop on Poisson Geometry and Higher Structures.**

10–14 September 2018, Rome, Italy.  
<http://www1.mat.uniroma1.it/ricerca/convegni/2018/hippo2018/>

**Homotopy algebras, deformation theory and quantization.**

16–22 September 2018, Bedlewo, Poland.  
<http://www.impan.pl/18-homotopy>

**Geometric Analysis and Mathematical Physics.**

17–21 September 2018, Oldenburg, Germany.  
<https://www.uni-oldenburg.de/geometric-analysis-and-mathematical-physics>

**Workshop on dynamical systems, calculus of variations and control.**

8–9 November 2018, Firenze, Italy.  
<http://wp.maths.usyd.edu.au/igs/workshops/integrable-systems-2018/>

**Workshop on Integrable Systems.**

29–30 November 2018, Sydney, Australia.  
<http://events.dimai.unifi.it/DSCVC2018/>

**International Workshop on Geometric Quantization and Applications.**

8–12 October 2018, Marseille Luminy, France.  
<https://conferences.cirm-math.fr/1867.html>

**Geometric aspects of noncommutative principal bundles.**

15–26 October 2018, Marseille Luminy, France.  
<https://conferences.cirm-math.fr/2177.html>

## Job offers, fellowships and supports

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### Ph.D. offers

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**PhD positions in applied mathematics.**

Aachen University (Germany)  
**Closing date: 6 August 2018.**  
<http://euro-math-soc.eu/job/phd-and-postdoc-positions-applied-mathematics>

**Grant in motion control and optimisation.**

University of Antwerp (Netherlands)  
**Closing date: 12 August 2018.**  
<https://www.uantwerpen.be/en/jobs/vacancies/ap/2018bapdocproex223/>

**PhD position in mathematics.**

Marie Curie Individual Fellowship 2018.  
BCAM (Bilbao, Spain).  
**Closing date: 12 September 2018.**  
<https://www.bizkaiatalent.eus/en/profesionales/oportunidades-de-empleo/?id=1997>

**Doctoral candidate in mathematics.**

University of Luxembourg (Luxembourg)  
**Closing date: 15 September 2018.**  
<http://recruitment.uni.lu/en/details.html?nPostingTargetId=25699>

**PhD positions in applied geometry.**

Institute of Applied Geometry, Johannes Kepler University (Linz, Austria)  
**Closing date: Open.**  
[http://www.ag.jku.at/home\\_en.htm](http://www.ag.jku.at/home_en.htm)

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

University of Luxembourg (Luxembourg)  
**Closing date: Open until filled.**  
<https://academicpositions.es/ad/university-of-luxembourg/2018/doctoral-candidate-phd-student-in-the-systems-control-group-m-f/116152>

### **INPhINIT doctoral fellowship program.**

Research centres in Spain

**Closing date: Open.**

<https://obrasociallacaixa.org/en/investigacion-y-becas/programa-de-becas-de-posgrado/inphinit/programme-description>

## **Postdoctoral fellowships**

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### **Postdoctoral positions in applied mathematics.**

Aachen University (Germany)

**Closing date: 6 August 2018.**

<http://euro-math-soc.eu/job/phd-and-postdoc-positions-applied-mathematics>

### **Postdoctoral position in mathematics.**

University of Texas at Arlington (United States)

**Closing date: 7 August 2018.**

<https://www.mathjobs.org/jobs/jobs/11688>

### **Postdoctoral position in arithmetic geometry.**

University of Luxembourg (Luxembourg)

**Closing date: 8 August 2018.**

<http://recruitment.uni.lu/fr/details.html?nPostingTargetID=25942>

### **Postdoctoral position in differential geometry.**

University of Jena (Germany)

**Closing date: 12 August 2018.**

<http://euro-math-soc.eu/job/postdoctoral-position-3-years-differential-geometry-wissenschaftliche-mitarbeiterin-0>

### **FRIAS Cofund Fellowship Programme.**

Freiburg Institute for Advanced Studies, Germany

**Closing date: 15 September 2018.**

[http://www.frias.uni-freiburg.de/en/funding-programmes/cofund?set\\_language=en](http://www.frias.uni-freiburg.de/en/funding-programmes/cofund?set_language=en)

### **Sonata Bis funding.**

Addressed to researchers wanting to establish a new research team. Poland

**Closing date: 17 September 2018.**

<http://www.ncn.gov.pl/finansowanie-nauki/konkursy/typy/7?language=en>

### **Postdoctoral position in complex and symplectic geometry.**

University of Florence (Italy)

### **High dimensional geometric algorithms.**

CWI (Amsterdam, Netherlands)

**Closing date: Open until filled.**

<http://homepages.cwi.nl/~dadush/ad/phd-position.html>

**Closing date: 10 October 2018.**

<https://titulus.unifi.it/albo/viewer?view=files%2F002788389-UNFICLE-d6490c75-8ecb-46c8-a627-9f6e1ff7d1a8-000.pdf>

### **Postdoctoral positions in mathematics.**

IAS School of Mathematics, Princeton, United States

**Closing date: 1 December 2018.**

<https://www.math.ias.edu/administration/applications>

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

Harvard University

**Closing date: Open until filled.**

<http://cmsa.fas.harvard.edu/jobs/>

### **Postdoctoral positions in mathematics.**

Einstein Institute of Mathematics, Jerusalem, Israel

**Closing date: Open until filled.**

<https://mathematics.huji.ac.il/book/faculty-positions-0>

### **Humboldt research fellowship for postdoctoral researchers.**

Alexander von Humboldt Foundation

**Closing date: Open.**

<https://www.humboldt-foundation.de/web/humboldt-fellowship-postdoc.html>

### **Lisa Meitner program.**

FWF Austrian Science Fund (Vienna, Austria)

**Closing date: Open.**

<https://www.fwf.ac.at/en/research-funding/application/>

### **Funded postdoctoral fellowship.**

University of Reading, United Kingdom

**Closing date: Open.**

<https://www.reading.ac.uk/maths-and-stats/JobsAndFellowships/maths-fellowships.aspx>

## Offers for researchers

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### **Lecturer in mathematics.**

University of Waterloo, Canada

**Closing date: 3 August 2018.**

<https://www.mathjobs.org/jobs/jobs/12119>

### **Research associates in mathematics.**

Pennsylvania State University, United States

**Closing date: 7 August 2018.**

<https://www.mathjobs.org/jobs/jobs/10511>

### **Research associate in Mathematics.**

University of Kent, United Kingdom

**Closing date: 20 August 2018.**

[https://www11.i-grasp.com/fe/tp1\\_kent01.asp?newms=jj&id=41981&aid=14243](https://www11.i-grasp.com/fe/tp1_kent01.asp?newms=jj&id=41981&aid=14243)

### **Senior research scientist in control systems.**

United Technologies Research Centre Ireland (Cork, Ireland)

**Closing date: 26 August 2018.**

<https://jobs.utrc.utc.com/job/cork/utrci-research-scientist-control-systems/1739/6900532>

### **Scientific Director of the Basque Center for Applied Mathematics (BCAM).**

BCAM (Bilbao, Spain)

**Closing date: 21 September 2018.**

<http://www.ikerbasque.net/sites/default/files/files/2018%20BCAM%20Scientific%20Director%20Call.pdf>

### **Tenure-track position in mathematics.**

University of Rio de Janeiro (Brazil)

**Closing date: 31 August 2018.**

<http://euro-math-soc.eu/job/tenure-track-position-departamento-de-matem%C3%A1tica-puc-rio-de-janeiro-brazil>

### **Professor in Mathematics (geometry).**

University of Luxembourg (Luxembourg)

**Closing date: 30 November 2018.**

<http://recruitment.uni.lu/en/details.html?nPostingTargetID=23999>

### **Mathematics adjunct instructors.**

Portland State University, Oregon, United States

**Closing date: Open until filled.**

<https://jobs.hrc.pdx.edu/postings/26062>

### **Assistant professor in mathematics.**

Institute for Computational and Experimental Research in Mathematics.

Brown University (Rhode Island, United States).

**Closing date: Open until filled.**

<https://icerm.brown.edu/simonscollaboration/open-positions/>

### **Assistant professor in algebraic geometry.**

Geometry and Mathematical Physics Group.

SISSA (Trieste, Italy).

**Closing date: Open until filled.**

<https://www.mathjobs.org/jobs/jobs/11863>

### **Assistant professor in mathematics.**

Brown University (Rhode Island, United States)

**Closing date: Open until filled.**

<https://www.mathjobs.org/jobs/jobs/10557>

## 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.**

<https://www.samsi.info/participating/visiting-research-fellows/>

### **Research in pairs in the Mathematisches Forschungsinstitut Oberwolfach.**

Oberwolfach, Germany.

Between 2 and 4 people, from 2 weeks to 3 months.

**Closing date: Six months before planned stay.**

<http://www.mfo.de/for-guest-researchers/apply-for-a-stay/apply-for-research-in-pairs>

### **Focused research groups in Banff, Canada.**

Banff International Research Station, Canada.

Up to 8 researchers for periods of 1 to 2 weeks.

**Closing date: A minimum of 4 months before the proposed start of the event.**

<http://www.birs.ca/programs/general-program-descriptions>

### **Research in Teams in Banff, Canada.**

Banff International Research Station, Canada.

Teams of 2 to 4 researchers for 1 to 2 weeks.

**Closing date: A minimum of 4 months before the proposed start of the event.**

<http://www.birs.ca/programs/general-program-descriptions>

### Centre International de rencontres mathématiques (CIRM).

CIRM, Marseille, France.

Research in pairs (2 to 3 researchers for 1 to 2 weeks. CIRM subsidizes board and lodging for people not based in the region).

**Closing date: Open all year.**

<https://www.cirm-math.com/research-in-pairs.html>

### Visiting the ICMAT.

Instituto de Ciencias Matemáticas, Madrid, Spain.

Researchers for a period 1 to 12 months.

**Closing date: 2 months before the start of the desired stay.**

<http://www.icmat.es/people/visitFac>

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

Fondazione Bruno Kessler, Trento, Italy.

2-3 people for working on a project from 1 to 6 weeks.

**Closing date: Open.**

<http://cirm.fbk.eu/research-pairs>

### Visiting scholar opportunity in Cambridge.

University of Cambridge, United Kingdom.

Scholars and fellows for development of research, teaching and collaboration.

**Closing date: Open.**

<https://www.educ.cam.ac.uk/about/visiting-scholars/>

### Visiting the CRM.

Centre de Recerca Matemàtica, Catalonia, Spain.

Any time between 6 and 12 months before the start of the desired stay.

**Closing date: Open.**

<http://www.crm.cat/en/Host/VisitingCRM/Pages/ResearchPairs.aspx>

### Visiting research fellow in Kent State University.

Mathematics Department-KSU, Ohio, USA.

Visiting for scholar researchers.

**Closing date: Open.**

<http://www.kent.edu/globaleducation/visiting-scholars>

## Financial support for research projects and conferences

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### Call for applications of support for training in research.

Centre International de Mathématiques Pures et Appliquées, France.

**Deadline: 3 July 201x for projects in period September 201x-February 201(x+1).**

[https://www.cimpa.info/en/support\\_for\\_training\\_in\\_research/call\\_for\\_applications](https://www.cimpa.info/en/support_for_training_in_research/call_for_applications)

### Call for Projects of CIMPA Research Schools 2020.

Centre International de Mathématiques Pures et Appliquées, France.

**Deadline: The deadline is September, 10 2018.**

<https://www.cimpa.info/node/41>

### Support for workshop organization.

Banff International Research Station.

**Deadline: No precise deadline but notification with months in advance.**

<http://www.birs.ca/programs/general-program-descriptions>

### Propose a workshop in the Mathematisches Forschungsinstitut Oberwolfach.

Oberwolfach, Germany.

**Deadline: Open.**

<https://www.mfo.de/scientific-programme/meetings/workshop>

### International Mathematical Union-Conference support program.

Partial support for conferences organized in developing or economically disadvantaged countries..

**Deadline: Several calls.**

<http://www.mathunion.org/cdc/grants/conference-support-program/>

### Mathematical and physical sciences funding.

National Science Foundation.

**Deadline: No precise deadline.**

[https://www.nsf.gov/funding/pgm\\_list.jsp?org=MPS](https://www.nsf.gov/funding/pgm_list.jsp?org=MPS)

### Hosting a workshop at AIMS South Africa.

Contributions to the cost of workshops which falls within one of AIMS's research focus areas.

**Deadline: No precise deadline.**

<https://www.aims.ac.za/en/research-centre/workshops-conferences/hosting-a-workshop-at-aims>

## Preprints and papers

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### Network's members

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Florio M. Ciaglia, Alberto Ibort and Giuseppe Marmo: *A gentle introduction to Schwinger's formulation of quantum mechanics: The groupoid picture.*

1807.00519

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

A. M. Grundland and J. de Lucas: *On the geometry of the Clairin theory of conditional symmetries for higher-order systems of PDEs with applications.*

1807.01610

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

Lukas Gonon and Juan Pablo Ortega: *Reservoir Computing Universality With Stochastic Inputs.*

1807.02621

[cs.ET, cs.NE, math.DS, math.PR]

S. Capriotti and E. García-Toraño Andrés: *Routh reduction for first-order field theories.*

1807.03668

[math-ph, math.MP]

Juan Margalef-Bentabol: *Towards general relativity through parametrized theories.*

1807.05534

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

### Network's collaborators

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Dirk Kreimer: *Multi-valued Feynman Graphs and Scattering Theory.*

1807.00288 (version 2)

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

Miguel A. Rodríguez, Álvaro Romaniega and Piergiulio Tempesta: *A new class of entropic information measures, formal group theory and information geometry.*

1807.01581

[math-ph, cond-mat.stat-mech, hep-th, math.DG, math.MP]

R. Ramirez and M. Reboiro: *Time evolution of non-hermitian hamiltonians: use of Krein Spaces.*

1807.02888

[math-ph, math.MP]

Simon Hochgerner: *A Hamiltonian Mean-Field System for the Navier-Stokes Equation.*

1807.04123

[math-ph, math.MP]

Camille Laurent-Gengoux and Friedrich Wagemann: *Lie rackoids integrating Courant algebroids.*

1807.05891

[math.AT, math.SG]

Alina Dobrogowska and David J. Fernández C.: *Darboux transformations and second order difference equations.*

1807.06895

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

Boris Khesin, Gerard Misiolek and Klas Modin: *Geometry of the Madelung transform.*

1807.07172 (version 2)

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

Gabriella Bretti, Emiliano Cristiani, Corrado Lattanzio, Amelio Maurizi and Benedetto Piccoli: *Two algorithms for a fully coupled and consistently macroscopic PDE-ODE system modeling a moving bottleneck on a road.*

1807.07461

[math.DS, math.OC]

Pierre Clavier, Li Guo, Sylvie Paycha and Bin Zhang: *Renormalisation and locality: branched zeta values.*

1807.07630

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

Camille Laurent-Gengoux and Mohsen Mas-moudi: *Infinis morphismes de Leibniz pour les crochets dérivés.*

1807.08134

[math.DG]

F. Bonechi, A. S. Cattaneo, R. Iraso and M. Zabzine: *Observables in the equivariant A-model.*

1807.08659

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

## Network's news

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### PhD Thesis.

*A Multisymplectic Approach to Gravitational Theories.*

Author: Jordi Gaset Rifà.

Advisor: Narciso Román Roy.

Date: 25 July 2018.

<http://drive.google.com/file/d/18KocbQVr-jWAsjxY4ik2EB--stEsGBQs/view?usp=sharing>

## Links of interest

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### The GMC network.

International, spanish based network focused on Geometry, Mechanics and Control.

<http://gmcnet.webs.u11.es/>

### Journal of Geometric Mechanics (JGM).

Volume 10, Issue 2, 2018.

<http://aimsciences.org/journal/1941-4889/2018/10/2>

### IMU-Net 88.

May 2018.

<https://www.mathunion.org/fileadmin/IMU/Organizational/imu-net/pdfs/2018/IMU-Net-89.pdf>

### ICMAT Newsletter.

17th number. Second semester 2018.

<https://www.icmat.es/outreach/newsletter/num17>

### New AIMS Journal.

New open access journal.

<http://www.aimspress.com/journal/Math>

### International Center of Pure and Applied Mathematics (CIMPA).

<https://www.cimpa.info/>

### Spanish math journals.

[http://www.rsme.es/component/option,com\\_weblinks/catid,51/Itemid,23/](http://www.rsme.es/component/option,com_weblinks/catid,51/Itemid,23/)

### Reports@SCM journal.

<http://revistes.iec.cat/index.php/reports/>

### Mathematics in Europe.

<http://www.mathematics-in-europe.eu/>

### Online textbooks: MIT Open courseware.

<https://ocw.mit.edu/courses/online-textbooks/>

### The American Mathematical Society bookstore.

<http://www.ams.org/bookstore/whatsnew>

### Jobs for Mathematicians.

<https://www.mathjobs.org/jobs>

### Academic positions in Spain, France and Belgium.

Mathematics and Physics related areas.

<http://postes.smai.emath.fr/postdoc/>

### Academic jobs in Mathematics in Europe.

PhD, post doc positions, research assistant, etc.

<http://academicpositions.eu/>

### Academic jobs in Mathematics in the UK.

PhD, post doc positions, research assistant, etc.

<http://www.jobs.ac.uk/categories/postdoc-jobs>

### Postdocs in Mathematics worldwide.

PhD, post doc positions, research assistant, etc.

<http://www.findapostdoc.com/>

### Academic jobs in Mathematics worldwide.

PhD, post doc positions, research assistant, etc.

<https://www.postdocjobs.com/>

### Academic jobs in Mathematics in Spain.

PhD, post doc positions, research assistant, vacant jobs, lectureships.

<http://www.madrimasd.org/madrid-ciencia-tecnologia/convocatorias>

### Academic jobs in Mathematics.

PhD, post doc positions, research assistant, vacant jobs, lectureships.

<http://www.indeed.com/q-Postdoctoral-jobs.html>

### Advice for New Ph.D.'s.

<http://www.ams.org/profession/career-info/new-phds/new-phds>

### SIAM Activity Group on Control and Systems Theory Prize.

<https://www.siam.org/Prizes-Recognition/Activity-Group-Prizes/Detail/SIAG-Control-and-Systems-Theory-Prize>

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

<https://www.siam.org/Prizes-Recognition/Activity-Group-Prizes/Detail/SIAG-CST-Best-SICON-Paper-Prize>

**International Mathematical Union Awards and Prizes.**

<https://www.mathunion.org/imu-awards/imu-awards-prizes-and-special-lecture>

**Other Prizes of International Mathematical Union.**

<https://www.mathunion.org/imu-awards/other-prizes>

**American Mathematical Society Prizes and Awards.**

<https://www.ams.org/profession/prizes-awards/prizes>

**The Shaw Prize.**

<http://www.shawprize.org/en/shaw.php?tmp=2&twoid=77>

**European Mathematical Society Prizes.**

<http://euro-math-soc.eu/prizes-european-mathematical-society>

**Fermat Prize.**

<https://www.math.univ-toulouse.fr/spip.php?rubrique107&lang=en>

**Society for Industrial and Applied Mathematics Prizes.**

<https://www.siam.org/prizes/>

**Noether Lectures Award.**

<https://sites.google.com/site/awmmath/programs/noether-lectures>

**The Royal Society Grants.**

<https://royalsociety.org/grants/>

**The Royal Society's medals and award.**

<https://royalsociety.org/grants-schemes-awards/awards/nominations/>

**NOTE: If you want to include information in this info-sheet, please send it to [gmcnet@ull.es](mailto:gmcnet@ull.es)**