

Geometry, Mechanics and Control Network Infosheet

September 2018

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## GMC Network Infosheet

September 2018

## Network's activities

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=s/s/06

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**

CRM-PCTS Workshop on Critical Phenomena in Statistical Mechanics and Quantum Field Theory.

3-5 October 2018, Princeton, United States. www.crm.umontreal.ca/2018/CRMPCTS18/index\_e.php

Hamiltonian systems, from topology to applications through analysis I.

8–12 October 2018, Berkeley, California, USA.

http://www.msri.org/workshops/871

International Workshop on Geometric Quantization and Applications.

8-12 October 2018, Marseille Luminy, France.

https://conferences.cirm-math.fr/1867.html

Quantum Information and Quantum Statistical Mechanics.

15–19 October 2018, Montréal, Canada.

www.crm.umontreal.ca/2018/Quantique18/index\_e.php

Geometric aspects of noncommutative principal bundles.

15–26 October 2018, Marseille Luminy, France.

https://conferences.cirm-math.fr/2177.html

## 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/

## Hamiltonian systems, from topology to applications through analysis II.

26-30 November 2018, Berkeley, California, USA. http://www.msri.org/workshops/872

### Workshop on Integrable Systems.

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

### Workshop on Manifolds.

3-7 December 2018, Cambridge, UK. http://www.newton.ac.uk/event/hhhw04

## International Conference "Optimal Control and Differential Games".

12-14 December 2018, Moscow, Rusia. http://www.mathnet.ru/eng/conf1287

# Variational problems in Geometry and Mathematical Physics, Winter School.

7-10 January 2019, Leeds, United Kingdom. http://www1.maths.leeds.ac.uk/~pmtgk/ukjapan 2019/home.html

## Workshop on Differential Geometry in the Large.

04-15 February 2019, Victoria, Australia. https://www.matrix-inst.org.au/events/australian-german-workshop-on-differential-geometry-in-the-large/

## Job offers, fellowships and supports

#### Ph.D. offers

### PhD positions in Mathematics.

The Open University, Milton Keynes, United Kingdom

Closing date: 19 October 2018.

http://www.mathematics.open.ac.uk/study/phd

### PhD studentship in Mathematics.

University of Warwick, United Kingdom

Closing date: 5 December 2018.

https://www.jobs.ac.uk/job/BM0616

# PhD studentship in Partial Differential Equations.

University of Sussex, United Kingdom Closing date: 6 December 2018.

https://www.jobs.ac.uk/job/BMP334/

## 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

## High dimensional geometric algorithms.

 $CWI\ (Amsterdam,\ Netherlands)$ 

Closing date: Open until filled.

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

#### Open PhD Positions in Geometry.

Max Planck Institute For Informatics, Saarbrücken, Germany

Closing date: Open until filled.

http://euro-math-soc.eu/job/open-phd-position-0

## PhD position in noncommutative differential geometry.

Swansea University, United Kingdom Closing date: Open until filled.

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=97585

## Postdoctoral fellowships

## Postdoctoral positions "Viera y Clavijo".

University of La Laguna, Spain

Closing date: 10 October 2018.

https://www.ull.es/portal/convocatorias/convocatoria/viera-y-clavijo-2018/

### Postdoctoral position in geometry.

University of Florence, Italy

Closing date: 10 October 2018.

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

### 2 postdoctoral positions in Mathematics.

Institute of Mathematics CAS, Prague, Czech Republic

Closing date: 15 October 2018.

https://application.math.cas.cz/Positions.htm

1#page=CALL\_LIST

### Postdoctoral positions in Geometry.

Institute of Mathematics CAS, Prague, Czech Republic

Closing date: 30 October 2018.

https://application.math.cas.cz/Positions.htm

1#page=CALL\_LIST

### Junior group leader position in Mathematics.

Johann Radon Institute For Computational And Applied Mathematics, Linz, Austria

Closing date: 31 October 2018.

https://www.ricam.oeaw.ac.at/files/jobs/RICAM

\_Junior\_Group\_Leader\_20180821.pdf

### Postdoctoral positions in Mathematics.

IAS School of Mathematics, Princeton, United

Closing date: 1 December 2018.

https://www.math.ias.edu/administration/appl

ications

#### Postdoctoral associate in Mathematics.

Boston University, Massachusetts, United States

Closing date: 1 December 2018.

https://simonscollab.icerm.brown.edu/open-po

sitions/

## "Sonata" postdoctoral positions.

Polish research centres

Closing date: 17 December 2018.

http://www.ncn.gov.pl/finansowanie-nauki/konk

ursy/typy/3?language=en

## Postdoctoral fellowships in algebraic geometry and mathematical sciences.

Harvard University, Massachusetts, United States

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

### Research scientist in Mathematics.

Massachusetts Institute of Technology, Mas-

sachusetts, United States

Closing date: Open until filled.

https://simonscollab.icerm.brown.edu/open-po

## Humboldt research fellowship for postdoctoral researchers.

Alexander von Humboldt Foundation

Closing date: Open.

https://www.humboldt-foundation.de/web/humbol

dt-fellowship-postdoc.html

### Lisa Meitner program.

FWF Austrian Science Fund, Vienna, Austria

Closing date: Open.

https://www.fwf.ac.at/en/research-funding/ap

plication/

### Funded postdoctoral fellowship.

University of Reading, United Kingdom

Closing date: Open.

https://www.reading.ac.uk/maths-and-stats/Jo

bsAndFellowships/maths-fellowships.aspx

### Offers for researchers

#### Teaching Associate in Mathematics.

University of Sheffield, United Kingdom

Closing date: 15 October 2018.

https://www.jobs.ac.uk/job/BMQ788

### Professor positions in Mathematics.

University of Warwick, United Kingdom

Closing date: 21 October 2018.

http://euro-math-soc.eu/affiliation/departme

nt-mathematics-university-warwick

#### Professor in Applied Mathematics.

University of Córdoba, Spain

Closing date: 26 October 2018.

https://www.boe.es/diario\_boe/txt.php?id=BOE-

A-2018-13072

### 2 professor positions in Mathematics.

Geometry and Applied Mathematics.

University of Málaga, Spain.

Closing date: 29 October 2018.

https://www.boe.es/diario\_boe/txt.php?id=BOE-

A-2018-13153

### Lecturer in Mathematical Physics.

University of Melbourne, Australia

Closing date: 7 November 2018.

 $\verb|http://jobs.unimelb.edu.au/caw/en/job/897238/|$ 

lecturer-in-mathematical-physics

### Tenure-track position in Mathematics.

Duke University, North Carolina, United States Closing date: 9 November 2018.

https://www.mathjobs.org/jobs/jobs/12536

## Professor in Mathematics (geometry).

University of Luxembourg, Luxembourg

Closing date: 30 November 2018.

http://recruitment.uni.lu/en/details.html?nPo

stingTargetID=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://simonscollab.icerm.brown.edu/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

## Offers for visiting researchers

### 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 Forschunginstitut 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/appl y-for-a-stay/apply-for-research-in-pairs

## Focused research groups in Banff, Canada.

Banff International Researh 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 Researh 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 mathematiques (CIRM).

CIRM, Marseille, France.

2 to 3 researchers for 1 to 2 weeks. CIRM subsizes 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/visitingscholars/

### Small team 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

### Support for training in research.

Centre International de Mathématiques Pures et Appliquées (CIMPA), 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

### Thematic Programs at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: March 1st, October 1st and December 1st. Three years ahead.

http://tinyurl.com/msri-progprop

## Hot Topics Workshop at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: March 15, October 15 and December 15.

http://tinyurl.com/msri-htw

#### Summer Graduate Schools at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: March 15, October 15 and December 15.

http://tinyurl.com/msri-sgs

#### Support for workshop organization.

Banff International Research Station.

Deadline: No precise deadline.

http://www.birs.ca/programs/general-programdescriptions

# Propose a workshop in the Mathematisches Forschunginstitut Oberwolfach.

Oberwolfach, Germany.

Deadline: Open.

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

## Mathematical and physical sciences funding.

National Science Foundation.

Deadline: No precise deadline.

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

## 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/

## **Preprints and papers**

### Network's members

Malte Heuer and Madeleine Jotz Lean: Multiple vector bundles: cores, splittings and decompositions.

1809.01484

[math.DG]

Erfan Nozari and Jorge Cortés: Hierarchical Selective Recruitment in Linear-Threshold Brain Networks - Part I: Intra-Layer Dynamics and Selective Inhibition.

1809.01674

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

Stephen C. Anco, Ángel Ballesteros and María Luz Gandarias: Global versus local superintegrability of nonlinear oscillators.

1809.02248

[math-ph, math.MP]

Erfan Nozari and Jorge Cortés: Hierarchical Selective Recruitment in Linear-Threshold Brain Networks - Part II: Inter-Layer Dynamics and Top-Down Recruitment.

1809.02493

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

Anthony Bloch, Margarida Camarinha and Leonardo Colombo: Dynamic interpolation for obstacle avoidance on Riemannian manifolds.

1809.03168

[math.OC, cs.SY]

Farhang Haddad Farshi, Fernando Jiménez and Sina Ober-Blöbaum: Continuous and discrete damping reduction for systems with quadratic interaction.

1809.05532

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

Ángel Ballesteros, Iván Gutiérrez-Sagredo and Francisco J. Herranz: *The Poincaré group as a Drinfel'd double*.

1809.09207

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

#### Network's collaborators

Pantelis A. Damianou: Poisson brackets after Jacobi and Plucker.

1809.04538

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

Michael S. Ruf and Christian F. Steinwachs: Quantum effective action for degenerate vector field theories.

1809.04601

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

Giovanni Russo and Andrew Swann: Nearly Kähler six-manifolds with two-torus symmetry.

1809.05304

[math.DG]

Amadeu Delshams, Antoni Guillamon and Gemma Huguet: Quasi-periodic perturbations of heteroclinic attractor networks.

1809.05860

[math.DS]

Paolo Aniello, Joonwoo Bae and Dariusz Chruscinski: Quantum entropy and non-Markovian evolution.

1809.06133

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

Jurdjevic Velimir, Markina Irina and Silva Leite Fatima: Extremal curves on Stiefel and Grassmann manifolds.

1809.07013

[math.OC]

Saber Jafarpour, Elizabeth Y. Huang and Francesco Bullo: Synchronization of Kuramoto Oscillators: Inverse Taylor Expansions.

1809.08720

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

James Montaldi and Amna Shaddad: Generalized point vortex dynamics on  $CP^2$ .

1809.09007

 $[math-ph,\,math.DS,\,math.MP,\,math.SG]$ 

James Montaldi and Amna Shaddad: Non-Abelian momentum polytopes for products of  $CP^2$ . 1809.09020

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

Hendrik Grundling and Karl-Hermann Neeb: Crossed products of  $C^*$ -algebras for singular actions with spectrum conditions.

1809.09781

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

Giuseppe Marmo and Alessandro Zampini: Kähler geometry on complex projective spaces via reduction and unfolding.

1809.09993

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

Francisco Presas and Sushmita Venugopalan: Symplectic foliated fillings of sphere cotangent bundles.

1809.10363

[math.SG]

## Links of interest

#### The GMC network.

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

http://gmcnet.webs.ull.es/

### Journal of Geometric Mechanics (JGM).

Volume 10, Issue 2, 2018.

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

#### IMU-Net 90b.

August 2018.

https://www.mathunion.org/fileadmin/IMU/Organization/imu-net/pdfs/2018/IMU-Net-90b.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/

### 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/

## 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

### 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-tecn ologia/convocatorias

### Academic jobs in Mathematics.

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

http://www.indeed.com/q-Postdoctoral-jobs.htm

# 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/Acti vity-Group-Prizes/Detail/SIAG-CST-Best-SICO N-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

#### 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-math ematical-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 gmcactivities@gmail.com