

Geometry, Mechanics and Control Network Infosheet

December 2018

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### GMC Network Infosheet

### December 2018

### Network's activities

XX Winter Meeting on Geometry, Mechanics and Control

31 January and 1 February 2019, Zaragoza, Spain.

https://tinyurl.com/ycxoroy9

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

CIMPA School "The Geometry of Mechanics".

15-26 July 2019, Ibarra, Ecuador.

https://www.cimpa.info/en/node/6194

### Other Conferences

Variational Problems in Geometry and Mathematical Physics.

7–10 January 2019, Leeds, United Kingdom.

http://www1.maths.leeds.ac.uk/~pmtgk/ukjapan2019/home.html

Differential Geometry and Lie Theory in the Categorical Setting.

07-11 January 2019, Marseille Luminy, France.

https://conferences.cirm-math.fr/2200.html

The 57th IEEE Conference on Decision and Control.

9–10 January 2019, New Delhi, India.

http://icc.org.in/2019/

Groups and Geometries.

21–25 January 2019, Marseille Luminy, France.

https://conferences.cirm-math.fr/1920.html

3rd Bangkok workshop on Discrete Geometry Dynamics and Statistics.

21–25 January 2019, Bangkok, Thailand.

http://www.thaihep.phys.sc.chula.ac.th/BKK2019DSCR/

Workshop on Differential Geometry in the Large.

4–15 February 2019, Victoria, Australia.

https://tinyurl.com/yas5ajpq

# Geometric Analysis Meets Geometric Topology.

25-28 February 2019, Heidelberg, Germany. https://www.conference-service.com/conferences/geometry-and-topology.html

# Geometry and Mathematical Physics Workshop 2019.

27–30 March 2019, Leicestershire, United Kingdom.

https://sites.google.com/site/gmplboro/gmp 2019

### Integrability and Conformal Field Theory.

29-30 March 2019, Oxford, United Kingdom. https://sites.google.com/view/icft2019

### Geometry at Infinity.

1-5 April 2019, Münster, Germany. https://www.spp2026.de/news/detail/spp-conference-geometry-at-infinity/

# Integrability and Randomness in Mathematical Physics and Geometry.

8-12 April 2019, Marseille Luminy, France. https://www.chairejeanmorlet.com/2019-1-grava-bufetov-2104.html

# Algebraic and Geometric Aspects in Quantum Field Theory.

16–18 April 2019, Freiburg im Breisgau, Germany.

http://home.mathematik.uni-freiburg.de/murro/AGAQFT/index.html

### $G_2$ Geometry and Related Topics.

5-10 May 2019, Oaxaca, Mexico. https://www.birs.ca/events/2019/5-day-workshops/19w5145

# Finite Dimensional Integrable Systems in Geometry and Mathematical Physics.

7-11 May 2019, Shanghai, China. http://math.sjtu.edu.cn/FDIS2019/

# Variational Problems and the Geometry of Submanifolds.

27-31 May 2019, Marseille Luminy, France. https://conferences.cirm-math.fr/1936.html

# SIAM Conference on Applications of Dynamical Systems.

19-23 May 2019. Snowbird, Utah, USA. http://www.siam.org/meetings/calendar.php

#### Women in Geometry 2.

23-28 Jun 2019, Oaxaca, Mexico. https://www.birs.ca/events/2019/5-day-workshops/19w5115

# International Conference on Mathematics and Mechanics.

8-9 Jun 2019, Nice, France. http://mathematics.conference-site.com/

### Job offers, fellowships and supports

### Ph.D. offers

#### Excellence grant for foreigner students.

University of Santiago de Chile, Chile Closing date: 6 January 2019.

https://postgrado.usach.cl/es/nueva-beca-de-excelencia-para-extranjeros-y-extranjeras

#### Funded PhD positions in Austria.

Institute of Science and Technology Austria Closing date: 8 January 2019.

https://phd.pages.ist.ac.at/phd-admissions/

# Funded doctoral positions - "la Caixa" IN-PhINIT programme.

ICMAT, Madrid, Spain

Closing date: 6 February 2019.

https://www.icmat.es/resources/employment/INPhINIT\_La-Caixa

### PhD position in geometry.

Funded by the project "Calabi-Yau manifolds: families, fibrations, and degenerations". Loughborough University, United Kingdom.

Closing date: 15 February 2019.

https://www.lboro.ac.uk/science/study/postgraduate-research/studentships/

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

University of Luxembourg, Luxembourg Closing date: Open until filled.

https://academicpositions.es/ad/universityof-luxembourg/2018/doctoral-candidate-phdstudent-in-the-systems-control-group-m-f/ 116152

#### Open PhD Positions in Geometry.

Max Planck Institute For Informatics, Saarbrücken, Germany

Closing date: Open until filled.

 $\verb|http://euro-math-soc.eu/job/open-phd-positi|\\$ 

on-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

# Doctoral candidate in applied algebraic geometry.

Aalto University, Espoo, Finland

Closing date: Open until filled.

https://academicpositions.es/ad/aalto-university/2018/doctoral-candidate-in-applied-algebraic-geometry/121056

### Postdoctoral fellowships

# Postdoctoral research associate in algebraic geometry.

University of Cambridge, United Kingdom

Closing date: 7 January 2019.

http://www.jobs.cam.ac.uk/job/19392/

#### SISSA Mathematical Fellowships.

SISSA, Trieste, Italy Closing date: 8 January.

http://math.sissa.it/content/sissa-mathematic

al-fellowships

#### Postdoctoral position in geometry.

ERC Grant "Analysis of moving incompressible fluid interfaces".

Institute of Mathematics of the University of Seville, Spain.

Closing date: 15 January 2019.

https://www.imus.us.es/es/convocatoria/1260

# Juan de la Cierva-incorporación 2018 fellowships.

Postdoctoral positions for researchers.

Spanish research centres and universities.

Closing date: 29 January 2019. https://tinyurl.com/ychpufo6

### Juan de la Cierva-formación 2018 fellowships.

Postdoctoral positions for junior researchers. Spanish research centres and universities.

Closing date: 31 January 2019.

https://tinyurl.com/y7zd73xh

#### Postdoctoral position in control theory.

University of Graz, Austria

Closing date: 28 February 2019.

https://mathematik.uni-graz.at/en/research/er

c-advanced-grant-project/jobs/

#### Postdoctoral positions in geometry.

Heidelberg University, Germany

### Closing date: Open until filled.

https://www.mathjobs.org/jobs/jobs/12713

# 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, Massachusetts, United States

Closing date: Open until filled.

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

### Research position 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/

## 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

### University professor of algebraic geometry.

University of Vienna, Austria Closing date: 7 January 2019.

https://personalwesen.univie.ac.at/en/jobs-recruiting/professorships/detail-page/news/algebraic-geometry/

### Professor of Mathematics.

University of Bath, United Kingdom

Closing date: 7 January 2019.

https://www.bath.ac.uk/jobs/Vacancy.aspx?ref=

CC6245

### Assistant/Associate professor in Mathematics.

Heriot-Watt University, Edinburgh, United Kingdom

Closing date: 9 January 2019.

https://www.hw.ac.uk/about/work/jobs/job\_SVJ

 ${\tt DMTk3MDk.htm}$ 

# Tenure track professorship for pure mathematics.

Heidelberg University, Germany Closing date: 28 January 2019.

http://euro-math-soc.eu/job/tenure-track-professorship-w1-tenure-track-w3-pure-mathem

atics

#### Ramon y Cajal 2018 fellowships.

Spanish research centres and universities

Closing date: 30 January 2019.

http://www.ciencia.gob.es/portal/site/MICI NN/menuitem.dbc68b34d11ccbd5d52ffeb801432e a0/?vgnextoid=498d32e144e77610VgnVCM1000001d 04140aRCRD

#### Assistant professor in Mathematics.

Deusto University, Bilbao, Spain Closing date: Open until filled.

https://deusto.talentclue.com/es/node/38171378/

4590/modal

### Mathematics adjunct instructors.

Portland State University, Oregon, United States

Closing date: Open until filled.

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

#### Tenure track position in geometry.

McMaster University, Ontario, Canada

Closing date: Open until filled.

https://www.mathjobs.org/jobs/jobs/12720

#### Tenure track positions in Mathematics.

University of Texas at Dallas, United States

Closing date: Open until filled.

https://jobs.utdallas.edu/postings/11339

#### Assistant professor in Mathematics.

Embry-Riddle Aeronautical University

at

Prescott, Arizona, United States

Closing date: Open until filled.

https://www.mathjobs.org/jobs/jobs/13189

#### 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/apply-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.

 ${\bf Mathematics\ Department-KSU,\ Ohio,\ USA.}$ 

Visiting for scholar researchers.

Closing date: Open.

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

### Financial support for research projects and conferences

#### Thematic Programs at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: December 1st, March 1st and October 15. Three years ahead.

http://tinyurl.com/msri-progprop

#### Hot Topics Workshop at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: December 1st, March 15 and October 15.

http://tinyurl.com/msri-htw

#### Summer Graduate Schools at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

Deadline: December 1st, March 15 and October 15.

http://tinyurl.com/msri-sgs

# Innovative Training Networks (Horizon 2020).

European Commission, Brussels, Belgium.

Deadline: 15 February 2019.

https://tinyurl.com/ya5vpaj7

# Research and Innovation Staff Exchange (Horizon 2020).

European Commission, Brussels, Belgium.

Deadline: 2nd April 2019.

https://tinyurl.com/ybcdrclr

### Support for training in research (CIMPA).

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

### Support for workshop organization.

Banff International Research Station.

Deadline: No precise deadline.

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

Propose a workshop in the Mathematisches Forschunginstitut Oberwolfach.

Oberwolfach, Germany.

Deadline: Open.

https://www.mfo.de/scientific-programme/meet

ings/workshop

Mathematical and physical sciences funding.

National Science Foundation.

Deadline: No precise deadline.

https://www.nsf.gov/funding/pgm\_list.jsp?org=

 $\mathtt{MPS}$ 

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://tinyurl.com/y8p3t34j

# International Mathematical Union-Conference support program.

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

Deadline: Several calls.

 $\verb|http://www.mathunion.org/cdc/grants/conferen|\\$ 

ce-support-program/

### Preprints and papers

#### Network's members

Roisin Braddell, Anna Kiesenhofer and Eva Miranda: Cotangent models for group actions on b-Poisson manifolds.

1811.11894 (version 3)

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

Luis C. García-Naranjo and Juan C. Marrero: The geometry of nonholonomic Chaplygin systems revisited.

1812.01422

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

Iván Gutierrez-Sagredo, Ángel Ballesteros and Francisco J. Herranz: *Drinfel'd double structures* for Poincaré and Euclidean groups.

1812.02075

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

Robert Cardona and Eva Miranda: On the volume elements of a manifold with transverse zeroes

1812.03800 (version 3)

[math.SG]

V. M. Jiménez, M. de León and M. Epstein: On the homogeneity of non-uniform material bodies. 1812.04970 (version 2)

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

Xavier Gràcia, Xavier Rivas and Narciso Román-Roy: Constraint algorithm for singular field theories in the k-cosymplectic framework.

1812.08487

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

Vishaal Krishnan and Sonia Martínez: A Distributional Framework for Moving-Horizon Estimation: Stability and Privacy Guarantees.

1812.09672 [math.OC]

#### Network's collaborators

Christian Blohmann and Alan Weinstein: *Hamiltonian Lie algebroids*.

1811.11109

[math.SG, math.DG]

François Gay-Balmaz and Hiroaki Yoshimura: A Variational Formulation of Nonequilibrium Thermodynamics for Discrete Open Systems with Mass and Heat Transfer.

1811.11665

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

N. Aizawa, I. E. Cunha, Z. Kuznetsova and F.

Toppan: On the spectrum-generating superalgebras of the deformed one-dimensional quantum oscillators.

1812.00873

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

Gou Nishida and Bernhard Maschke: Topological geometric extension of Stokes-Dirac structures for global energy flows.

1812.08786 [math.DG]

Julia Cen and Andreas Fring: Multicomplex soli-

tons.

1812.02111

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

A. K. Halder, Andronikos Paliathanasis and P. G. L. Leach: *Noether's Theorem and Symmetry*. 1812.03682

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

Thierry Daudé, Niky Kamran and François Nicoleau: Stability in the inverse Steklov problem on warped product Riemannian manifolds. 1812.07235

[math.AP, math-ph, math.MP, math.SP]

Jaime Muñoz Masqué and Luis Miguel Pozo Coronado: First-order invariants of differential 2-

forms. 1812.07284 [math.DG]

Yacine Chitour, Guilherme Mazanti and Mario Sigalotti: On the gap between deterministic and probabilistic joint spectral radii for discrete-time linear systems.

1812.08399

[math.OC, math.DS, math.PR]

Maria Días, Esteban Isasi and Luis Vásquez: The SU(3)  $A_1$  graph and its associated quantum groupoid.

1812.08730

[math-ph, math.MP]

### 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 4, 2018.

http://aimsciences.org/journal/1941-4889/ 2018/10/4

#### IMU-Net 92.

November 2018.

https://www.mathunion.org/fileadmin/IMU/Organization/imu-net/pdfs/2018/IMU-Net-92.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

### Euraxess Spain.

Researchers in motion.

https://www.euraxess.es/spain/science-spain

# 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.

 $\verb|http://academicpositions.eu/|$ 

#### 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-tecnologia/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://tinyurl.com/ydcpznv7

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

https://tinyurl.com/ycjpzvz6

## 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-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-awar ds/awards/nominations/

NOTE: If you want to include information in this info-sheet, please send it to gmcactivities@gmail.com