

GMC Network Infosheet

November 2018



Geometry, Mechanics and
Control Network
Infosheet

November 2018

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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 Con-
greso Bienal de la Real Sociedad Matemática Española.**

4–8 February 2019, Santander, Spain.

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

Other Conferences

Workshop on Manifolds.

3–7 December 2018, Cambridge, UK.

<http://www.newton.ac.uk/event/hhhw04>

**The 2018 Australian and New Zealand Control Confe-
rence.**

6–8 December 2018, Melbourne, Australia.

<https://anzcc.org.au/ANZCC2018/index.php>

Optimal Control and Differential Games.

12–14 December 2018, Moscow, Rusia.

<http://www.mathnet.ru/eng/conf1287>

**Variational Problems in Geometry and Mathemtical
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 Catego-
rical 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>

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>

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>

Job offers, fellowships and supports

Ph.D. offers

PhD positions in pure Mathematics.

KU Leuven, Belgium

Closing date: 2 December 2018.

<https://wis.kuleuven.be/methusalem-pure-math/jobs/phd-positions>

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/>

PhD position in control theory.

University of Surrey, United Kingdom

Closing date: 10 December 2018.

<https://www.surrey.ac.uk/postgraduate/computer-science-phd>

Excellence grant for foreigner students.

University of Santiago de Chile, Chile

Closing date: 9 January 2019.

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

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

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>

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

Research fellow in geometry.

University of Warwick, United Kingdom

Closing date: 16 December 2018.

https://atsv7.wcn.co.uk/search_engine/jobs.cgi?jcode=1772300&owner=5062452&ownertype=fair

“Sonata” postdoctoral positions.

Research centres in Poland

Closing date: 17 December 2018.

<http://www.ncn.gov.pl/finansowanie-nauki/konkursy/typy/3?language=en>

Postdoctoral fellowships in Mathematics.

Ben-Gurion University of the Negev, Israel

Closing date: End of December.

<https://www.math.bgu.ac.il/en/people/positions>

Postdoctoral research associate in algebraic geometry.

University of Cambridge, United Kingdom

Closing date: 2 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-mathematical-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>

Postdoctoral position in control theory.

University of Graz, Austria

Closing date: 28 February 2019.

<https://mathematik.uni-graz.at/en/research/erc-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

Lecturer / Associate professor in pure Mathematics.

University College London, United Kingdom

Closing date: 7 December 2018.

https://atsv7.wcn.co.uk/search_engine/jobs.cgi?jcode=1759664&owner=5041178&ownertype=fair

Lecturer in applied Mathematics.

University College London, United Kingdom

Closing date: 9 December 2018.

<https://www.jobs.ac.uk/job/B0A090>

Lecturer in pure Mathematics.

University College London, United Kingdom

Closing date: 13 December 2018.

<https://www.jobs.ac.uk/job/B0E392>

Assistant professor in analysis, dynamics and geometry.

Durham University, United Kingdom

Closing date: 14 December 2018.

<https://www.dur.ac.uk/jobs/recruitment/vacancies/math19-52/>

Fellowship in Mathematics.

Emmanuel College, Cambridge, United Kingdom

Closing date: 14 December 2018.

<https://www.emma.cam.ac.uk/about/jobs/#job70>

Faculty position in Mathematics.

Koç University, Istanbul, Turkey

Closing date: 15 December 2018.

<https://www.mathjobs.org/jobs/jobs/12901>

Lecturer in pure Mathematics.

University of York, United Kingdom

Closing date: 16 December 2018.

https://jobs.york.ac.uk/wd/plsql/wd_portal.show_job?p_web_site_id=3885&p_web_page_id=369995

Tenure position in geometry.

Dartmouth University, New Hampshire, United States

Closing date: 25 December 2018.

<https://www.math.dartmouth.edu//activities/recruiting/>

Professor of Mathematics.

University of Bath, United Kingdom

Closing date: 7 January 2019.

<https://www.bath.ac.uk/jobs/Vacancy.aspx?ref=CC6245>

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>

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 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.
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/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

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/ybcdrc1r>

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 Forschungsinstitut 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://tinyurl.com/y8p3t34j>

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

Manuel Lainz Valcázar and Manuel de León:
Contact Hamiltonian Systems.

1811.03367

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

Madeleine Jotz Lean: *On LA-Courant algebroids and Poisson Lie 2-algebroids.*

1811.04842

[math.DG]

L. Abrunheiro, M. Camarinha, J. Clemente-Gallardo, J. C. Cuchí and P. Santos: *A general framework for quantum splines.*

1811.08141

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

Network's collaborators

Thomas Bruun Madsen and Andrew Swann:
Toric geometry of Spin(7)-manifolds.

1810.12962 (version 2)

[math.DG]

Julia Cen, Andreas Fring and Thomas Frith:
Time-dependent Darboux (supersymmetric) transformations for non-Hermitian quantum systems.

1811.00149

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

Richard Montgomery: *Oscillating about coplanarity in the 4 body problem.*

1811.00608

[math.DS]

Paolo Aniello: *Discovering the manifold facets of a square integrable representation: from coherent states to open systems.*

1811.00858

[math-ph, math.MP]

Pierre Clavier, Li Guo, Sylvie Paycha and Bin Zhang: *Locality and renormalisation: Universal properties and integrals on trees.*

1811.01215

[math-ph, math.AC, math.CV, math.MP]

Martin Bauer, Nicolas Charon, Philipp Harms, Boris Khesin, Alice Le Brigant, Elodie Maignant,

Stephen Marsland, Peter Michor, Xavier Pennek, Stephen Preston, Stefan Sommer and François-Xavier Vialard: *Math in the Black Forest: Workshop on New Directions in Shape Analysis.*

1811.01370

[math.DG]

Tomoki Ohsawa: *The Symmetric Representation of the Generalized Rigid Body Equations and Symplectic Reduction.*

1811.03184

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

Dong Eui Chang and Matthew Perlmutter: *Feedback Integrators for Nonholonomic Mechanical Systems.*

1811.03757

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

Arjan van der Schaft and Bernhard Maschke: *Geometry of Thermodynamic Processes.*

1811.04227

[cond-mat.stat-mech, math-ph, math.MP, math.SG]

Marcelo Epstein: *Vlasov's beams and multivector Grassmann Statics.*

1811.04307

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

L. Machado, L. Abrunheiro and N. Martins: *Variational and Optimal Control Approaches for the Second-Order Herglotz Problem on Spheres.*

1811.04693

[math.DG, math.OC]

Matteo Petrera and Yuri B. Suris: *Geometry of the Kahan discretizations of planar quadratic Hamiltonian systems. II. Systems with a linear Poisson tensor.*

1811.05791

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

David J. Fernández C.: *Trends in supersymmetric quantum mechanics.*

1811.06449

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

Petre Birtea, Ioan Casu and Dan Comanescu: *Optimization on the symplectic group.*

1811.07345

[math.OC, math.DG, 53Bxx, 53Cxx, 53Dxx, 58Cxx]

Alberto S. Cattaneo, Domenico Fiorenza and Riccardo Longoni: *Graded Poisson Algebras.*

1811.07395

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

Peter A. Clarkson, David Gómez-Ullate, Yves Grandati and Robert Milson: *Rational solutions of higher order Painlevé systems I.*

1811.09274

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

A. Balmaseda and J. M. Pérez-Pardo: *Quantum Control at the Boundary.*

1811.09541

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

Alberto S. Cattaneo and Ivan Contreras: *Split Canonical Relations.*

1811.10107

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

D. Gómez-Ullate, Y. Grandati, S. Lombardo and R. Milson: *Rational solutions of dressing chains and higher order Painlevé equations.*

1811.10186

[math-ph, math.MP]

B. Basu-Mallick, N. Bondyopadhyaya, J. A. Carrasco, F. Finkel and A. González-López: *Supersymmetric t - J models with long-range interactions: partition function and motifs.*

1811.10297

[cond-mat.str-el, hep-th, math-ph, math.MP, nlin.SI]

Links of interest

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 4, 2018.

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

2018/10/4

IMU-Net 91.

August 2018.

<https://www.mathunion.org/fileadmin/IMU/Organization/imu-net/pdfs/2018/IMU-Net-91.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.
<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.html>

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>

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 gmactivities@gmail.com