

GMC Network Infosheet

April 2018



Geometry, Mechanics and
Control Network
Infosheet

April 2018

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Network's activities

12th International ICMAT Summer School on Geometry, Mechanics and Control.

2–6 July 2018, Santiago de Compostela, Spain.

<http://gmcnet.webs.ull.es/?q=activity-detail/1927>

VI Iberoamerican Meeting on Geometry, Mechanics and Control.

13–17 August 2018, Guanajuato, Mexico.

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

Job offers, fellowships and supports

Ph.D. offers

Research assistant in Mathematics.

Analysis of the Einstein equations.

Imperial College London (United Kingdom).

Closing date: 4 May 2018.

<http://www.imperial.ac.uk/jobs/description/NAT00129/research-assistant-mathematics>

Doctoral candidate in the Systems Control Group.

University of Luxembourg (Luxembourg)

Closing date: 7 May 2018.

<http://recruitment.uni.lu/en/details.html?nPostingTargetID=19939>

Ph.D. positions in Mathematics.

Analysis of singular and random systems.

Bielefeld University (Germany).

Closing date: 15 May 2018.

https://irtg.math.uni-bielefeld.de/doctoral_positions/open

Ph.D. fellowship in Fundamental Mathematics.

In the fields of higher category theory and non-commutative geometry.

University of Antwerp (Netherlands).

Closing date: 15 May 2018.

<https://www.uantwerpen.be/en/jobs/vacancies/ap/2018bapfwetef090/>

PhD position in Dynamic Control.

Universidad Autónoma de Madrid (Spain)

Closing date: 15 May 2018.

<https://www.euraxess.es/jobs/294190>

PhD positions.

Universidad Politécnica de Madrid (Spain)

Closing date: 17 May 2018.

http://www.upm.es/Investigacion/Programa_Propio_UPM/2018/talento?id=24134321a58d2610VgnVCM10000009c7648a___&fmt=detail

INdAM Doctoral programme fellowships in Mathematics.

Ph.D. Schools in Italy

Closing date: 31 May 2018.

<http://www.altamatematica.it/cofund-website/dp-2015/main/>

Introduction to research grants.

CSIC research centres (Spain)

Closing date: 1 June 2018.

<http://www.boe.es/boe/dias/2018/04/02/pdfs/B0E-B-2018-19978.pdf>

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

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>

High Dimensional Geometric Algorithms. CWI (Amsterdam, Netherlands)

Closing date: Open until filled.

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

PhD position in Control Theory.

NWO (Netherlands)

Closing date: Open until filled.

<https://www.nwo-i.nl/en/vacature/phd-positon-developing-controllers-for-a-physics-based-model-of-the-l-h-transition-in-a-tokamak/>

Postdoctoral fellowships

Research Assistant in Mathematics.

Imperial College London (United Kingdom)

Closing date: 4th May.

<http://www.jobs.ac.uk/job/BIR818/research-assistant-in-mathematics/>

Postdoctoral research assistant in control theory.

Aston University (Birmingham, United Kingdom)

Closing date: 13 May 2018.

<https://jobs.aston.ac.uk/Vacancy.aspx?ref=R180111>

Postdoctoral research associate in Computational Geometry and Topology.

University of Liverpool (United Kingdom)

Closing date: 14 May 2018.

https://recruit.liverpool.ac.uk/pls/corehrrecruit/erq_jobspec_version_4.display_form?p_company=1&p_internal_external=E&p_display_in_irish=N&p_process_type=&p_applicant_no=&p_form_profile_detail=&p_display_apply_ind=Y&p_recruitment_id=009013

Postdoctoral positions of InterTalentum program.

Theoretical Physics, Computing Sciences and Mathematics.

Universidad Autónoma de Madrid (Spain).

Closing date: 25 May 2018.

<https://http://congresos.fuam.es/fuamcongresos/intertalentum-posdoctoral-programme/home>

Postdoctoral positions in Mathematics.

Escola de Matemática Aplicada (Brazil)

Closing date: 15 July 2018.

<http://emap.fgv.br/pos-doutorado-de-excelencia>

Postdoctoral position in Pure Mathematics.

Johns Hopkins University (United States)

Closing date: Open until filled.

<https://www.mathjobs.org/jobs/jobs/10953>

Postdoctoral fellow.

Research areas of particular interest include Algebraic Geometry, Geometry & Topology, and Partial Differential Equations.

McMaster University (Ontario, Canada).

Closing date: Open until filled.

<https://www.mathjobs.org/jobs/jobs/11005>

Postdoctoral fellow in Pure Mathematics. ShanghaiTech University (Shanghai, China)

Closing date: Open until filled.

<http://jobs.shanghaitech.edu.cn/job.asp?id=733>

Postdoctoral position in dynamic control.

DeustoTech Research Center (Bilbao, Spain)

Closing date: Open until filled.

<http://cmc.deusto.eus/erc-advanced-grant-dycon-postdoc-contract-deustotech-201803/>

Postdoctoral position in Arithmetic Geometry.

Harvard University (Massachusetts, USA)

Closing date: Open until filled.

<https://icerm.brown.edu/simonscollaboration/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.

Department of Mathematics and Statistics (University of Reading)

Closing date: Open.

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

Offers for researchers

Assistant professor in Mathematics.

Universidad Politécnica de Madrid (Spain)

Closing date: 3 May 2018.

<http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Gestion%20Academica%20y%20Profesorado/PDI/Concursos/Contratados/res20180417YD/ANEX0%20170418-YD.pdf>

Professor in Mathematics.

Universidad Nacional a Distancia (Spain)

Closing date: 9 May 2018.

http://www.boe.es/diario_boe/txt.php?id=BOEA-2018-5360

Assistant/Associate professors in Algebra, Analysis or Topology.

Department of Mathematics.

Harbin Engineering University (China).

Closing date: 31 July 2018.

<https://www.mathjobs.org/jobs/jobs/10797>

Tenure-track assistant professor.

Department of Mathematics.

Drexel University (Philadelphia, Pennsylvania, United States).

Closing date: Open until filled.

https://www.drexeljobs.com/applicants/jsp/shared/position/JobDetails_css.jsp

Faculty member in Mathematics.

Bard High School Early College.

Bard College (Ohio, United States).

Closing date: Open until filled.

http://www.bard.edu/employment/descriptions/?listing_id=1587188

Mathematics adjunct instructors.

Maseeh Department of Mathematics and Statistics.

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, USA).

Closing date: Open until filled.

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

Assistant Professor of Mathematics in Topology, Algebra, or Geometry.

Mathematics Department.

Cleveland State University (Ohio, United States).

Closing date: Open until filled.

<https://hrjobs.csuohio.edu/postings/8755>

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>

Faculty Positions in Mathematics.

Koç University (Istanbul, Turkey)

Closing date: Open until filled.

<https://www.mathjobs.org/jobs/jobs/11084>

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/>

Visiting researchers at AIMS.

African Institute for Mathematical Sciences.

Visits from 2 weeks or longer.

Closing date: Open.

<https://https://aims.ac.za/research/research-opportunities/>

Research in pairs in the Mathematisches Forschungsinstitut Oberwolfach.

Mathematisches Forschungsinstitut Oberwolfach, Germany.

At least 2 and at most 4 people, stay between 2 weeks and 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>

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 the IMS.

Institute of Mathematical Sciences, India.

Visits range from days to a semester or more.

Closing date: Open.

<https://https://www.imsc.res.in/visiting-mathematics>

Visiting research fellow in Kent State University.

Mathematics Department-KSU, Ohio, USA.

Visiting for scholar researchers.

Closing date: Open.

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

Financial support for research projects and conferences

Propose a mini-workshop in the Mathematisches Forschungsinstitut Oberwolfach.

Oberwolfach, Germany.

Deadline: The deadline is the end of July.

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

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>

The Royal Society Grants.

Fund about 1500 researchers, including approximately 600 research fellows.

Deadline: No precise deadline.

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

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>

Mathematical and physical sciences funding.

National Science Foundation.

Deadline: No precise deadline.

https://www.nsf.gov/funding/pgm_list.jsp?org=MPS

Financial support from CICS.

Center for International Cooperation in Science.

Deadline: Several calls.

<http://www.cics.tn.nic.in/>

Links of interest

Journal of Geometric Mechanics (JGM).

Volume 10, Issue 1, 2018.

<http://aimsciences.org/journal/1941-4889/2018/10/1>

IMU-Net 88.

March 2018.

<https://www.mathunion.org/imu-net/archive/2018/imu-net-088>

ICMAT Newsletter.

16th number. First quarter 2018.

<https://www.icmat.es/outreach/newsletter/num16>

New AIMS Journal.

New open access journal.

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

The GMC network.

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

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

Reports@SCM journal.

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

Jobs for Mathematicians.

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

Spanish math journals.

http://www.rsme.es/component/option,com_weblinks/catid,51/Itemid,23/

International Center of Pure and Applied Mathematics (CIMPA).

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

List of mathematical journals.

http://www.rsme.es/component/option,com_weblinks/catid,49/Itemid,23/

Academic positions in Spain, France and Belgium.

Mathematics and Physics related areas.

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

Mathematics in Europe.

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

Online textbooks: MIT Open courseware.

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

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>

The American Mathematical Society bookstore.

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

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>

Interesting publications

Network's members preprints and papers

Vishaal Krishnan and Sonia Martínez: *Distributed optimal transport for the deployment of swarms.*

1804.01572

[math.OC]

A. Bolsinov, V. Matveev, E. Miranda and S. Tabachnikov: *Open Problems, Questions, and Challenges in Finite-Dimensional Integrable Systems.*

1804.03737

[math.DS, math.DG, math.SG]

M. Barbero-Liñán, H. Cendra, E. García-Toraño Andrés and D. Martín de Diego: *Morse families and Dirac systems.*

1804.04949

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

M. Barbero-Liñán, H. Cendra, E. García-Toraño Andrés and D. Martín de Diego: *New insights in the geometry and interconnection of port-Hamiltonian systems.*

1804.04951

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

Tor Anderson, Chin-Yao Chang and Sonia Martínez: *Distributed Approximate Newton Algorithms and Weight Design for Constrained Optimization.*

1804.06238

[math.OC]

Jordi Gaset and Narciso Román-Roy: *New multisymplectic approach to the Metric-Affine (Einstein-Palatini) action for gravity.*

1804.06181

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

Francesco Fassò, Luis C. García-Naranjo and James Montaldi: *Integrability and dynamics of the n -dimensional symmetric Veselova top.*

1804.09090

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

Network's collaborators preprints and papers

Simonetta Abenda and Petr G. Grinevich: *Real soliton lattices of KP-II and desingularization of spectral curves: the $Gr^{TP}(2,4)$ case.*

1803.10968

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

Alejandro Cabrera, Matías del Hoyo and Enrique Pujals: *Discrete dynamics and differentiable stacks.*

1804.00220

[math.DS, math.AT, math.DG]

Davide Barilari, Yacine Chitour, Frédéric Jean, Dario Prandi and Mario Sigalotti: *On the regularity of abnormal minimizers for rank 2 sub-Riemannian structures.*

1804.00971

[math.OC, math.DG]

Brendan Colvert and Eva Kanso: *A Local Sensory and Control Strategy for Following Hydrodynamic Signals.*

1804.02442

[math.OC, math.DS, physics.flu-dyn]

Richard Montgomery: *Metric cones, N -body collisions, and Marchal's lemma.*

1804.03059

[math.DS, math.DG]

Bozidar Jovanovic: *Rolling balls over spheres in \mathbb{R}^n .*

1804.03697

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

A. Moses Badlyan, B. Maschke, C. Beattie and V. Mehrmann: *Open physical systems: from GENERIC to port-Hamiltonian systems.*

1804.04064

[math.DS]

R. Flores-Espinoza, J. C. Ruíz-Pantaleón and Yu. Vorobiev: *Compatible Poisson Structures on Fibered 5-Manifolds.*

1804.05946

[math.SG, math.DG]

Kai Jiang, Truong Hong Minh and Nguyen Tien Zung: *Normalization of singular contact forms and primitive 1-forms.*

1804.06232

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

Ilka Agricola and Giulia Dileo: *Generalizations of 3-Sasakian manifolds and skew torsion.*

1804.06700

[math.DG]

Michel Dubois-Violette, Xiao Han and Giovanni Landi: *Principal fibrations over noncommutative spheres.*

1804.07032

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

Miguel Castillo-Celeita, Erik Díaz-Bautista and David J. Fernández C: *Polynomial Heisenberg algebras, multiphoton coherent states and geometric phases.*

1804.08543

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

Philip Arathoon and James Montaldi: *Hermitian flag manifolds and orbits of the Euclidean group.*

1804.09463

[math.RT, math.DG]

F. M. Ciaglia, G. Marmo and J. M. Pérez-Pardo: *Generalised Potential Functions in Differential Geometry and Information Geometry.*

1804.10414

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

Other Conferences

Stochastic Control, Computational Methods, and Applications.

7–11 May 2018, Minneapolis, MN.

<http://www.ima.umn.edu/2017-2018.5/W5.7-11.18>

International Conference on Mathematics and Mechanics 2018.

15–16 May 2018, Vienna, Austria.

<http://mathematics.conference-site.com/index.html>

XX Geometrical Seminar.

20–23 May 2018, Vrnjačka Banja, Serbia.

<http://euro-math-soc.eu/event/sun-20-may-18-1645/xx-geometrical-seminar>

GAP XVI Timisoara Lie theory and applications to mathematical physics.

29 May–2 June 2018, Timisoara, Romania.

<http://www.geometryandphysics.org/gapxvi/?i=1>

XXth International Conference on Geometry, Integrability, and Quantization.

2–7 June 2018, near Varna, Bulgaria.
<http://www.bio21.bas.bg/conference/>

Summer School on "Derived and Higher Structures in Geometry and Physics" SMS 2018.

11–22 June 2018, Toronto, Canada.
<http://www.fields.utoronto.ca/activities/17-18/sms-2018>

Rencontre Poisson à La Rochelle.

14–15 June 2018, La Rochelle, France.
<https://www.vladimir-salnikov.org/poisson18/index.php?page=home&lang=en>

IX International Meeting on Lorentzian Geometry.

17–24 June 2018, Warsaw, Poland.
<http://www.impan.pl/18-lorentzian9>

International Conference on Emerging Trends in Applied Mathematics and Mechanics 2018.

18–22 June 2018, Krakow, Poland.
<https://sites.google.com/view/etamm2/home>

VII School on Geometry and Physics.

25–29 June 2018, Białowieża, Poland.
<http://wgmp.uwb.edu.pl/>

WGMP – XXXVII Workshop on Geometric Methods in Physics.

1–7 July 2018, Białowieża, Poland.
<http://wgmp.uwb.edu.pl/>

12th International ICMAT Summer School on Geometry, Mechanics and Control.

2–6 July, 2018. Santiago de Compostela, Spain.
<http://gmcnet.webs.ull.es/?q=activity-detail1/1927>

PRACQSYS 2018: Principles and Applications of Control in Quantum Systems.

2–6 July, 2018. Paris, France.
<https://sites.google.com/view/mcqs2018/pracqsys-2018>

The 32nd International Colloquium on Group Theoretical Methods in Physics.

9–13 July 2018, Prague, Czech Republic.
<http://www.group32.cz/>

The Sixth International Conference on Control and Optimization with Industrial Applications.

11–13 July 2018, Baku, Azerbaijan.
<http://coia-conf.org/en/>

Non-Hermitian Quantum Mechanics and Symplectic Geometry.

16–20 July 2018, San José, California, USA.
<https://aimath.org/workshops/upcoming/nhquantumsymp/>

CBMS-NSF Conference: Computational Methods in Optimal Control.

23–27 July 2018, Jackson, Mississippi.
<http://www.siue.edu/~juliu/cbms18/>

Modern Trends in Differential Geometry.

23–27 July 2018, São Paulo, Brazil.
<https://www.ime.usp.br/~mtg/index.html>

Summer Graduate School: From Symplectic Geometry to Chaos.

23 July-3 August 2018, Berkeley, California, USA.
http://www.msri.org/summer_schools/825

Second Global Conference on Applied Physics, Mathematics and Computing.

25–27 July 2018, Madrid, Spain.
<http://physicsmathcomputing.com/>

International Congress of Mathematicians.

1–9 August 2018, Rio de Janeiro, Brazil.
<http://www.icm2018.org/portal/en/home/>

XXVII International Fall Workshop on Geometry and Physics.

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

INdAM Workshop on Poisson Geometry and Higher Structures.

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

NOTE: If you want to include information in this info-sheet, please send it to gmcnet@ull.es