

GMC Network Infosheet

November 2019



Geometry, Mechanics and Control Network Infosheet

November 2019

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Network's activities

14th International Young Researchers Workshop on Geometry, Mechanics and Control.

16–18 December 2019, Göttingen, Germany.

<https://www.uni-goettingen.de/en/607463.html>

Other conferences

Symplectic Geometry with Algebraic Techniques with applications to Mathematical Physics.

10–13 December 2019, Madrid, Spain.

<https://tinyurl.com/y6krqnm9>

Integrability, Algebra and Geometry.

13 December 2019, Glasgow, Scotland.

https://www.maths.gla.ac.uk/~dvaleri/conferences/iag_2019/iag.html

Supergeometry, supersymmetry and quantization.

16–19 December 2019, Luxembourg.

<http://math.uni.lu/SuperWork/SuperConference.html>

Geometry from the Quantum.

13–17 January 2020, Santa Barbara, USA.

<https://www.kitp.ucsb.edu/activities/qgravity-c20>

9th International Conference on Quantum Simulation and Quantum Walks.

20–24 January 2020, Marseille, France.

<https://conferences.cirm-math.fr/2161.html>

Connections for Women: Quantum Symmetries.

23–24 January 2020, Berkeley, USA.

<http://www.msri.org/workshops/905>

Symmetry and Geometry on the Southern Great Plains.

24–26 January 2020, Oklahoma, USA.

https://math.ou.edu/~mjablonski/SGSGP_2020/

Introductory Workshop: Quantum Symmetries.

27–31 January 2020, Berkeley, USA.

<http://www.msri.org/workshops/905>

Symplectic Geometry, Contact Geometry and Interac- tions.

6–8 February 2020, Antwerpen, Belgium.

<https://tinyurl.com/y67nzdke>

Group Actions in Aritmetic and Geometry (CIMPA School).

17–28 February 2020, Yogyakarta, Indonesia.
<http://www.rnta.eu/Yogyakarta2020/>

Implicit Function Theorems in Geometry and Dynamics (Winter School).

19–22 February 2020, Ebsdorfergrund, Germany.
<https://tinyurl.com/vndt7vg>

Tensor categories and topological quantum field theories.

16–20 March 2020, Berkeley, USA.
<http://www.msri.org/workshops/917>

Geometric Variational Problems.

23–27 March 2020, Ulm, Germany.
<https://tinyurl.com/uxtvgok>

New Perspectives on Sys Mirror Symmetry.

30 March–1st April 2020, London, England.

<https://sites.google.com/view/imperial-syz>

Workshop on classical and quantum aspects of symplectic geometry.

6–9 April 2020, Nantes, France.
<https://tinyurl.com/vje4msw>

Regularity theory for elliptic and parabolic systems and problems in continuum mechanics.

6–9 May 2020, Telč, Czech Republic.
<https://tinyurl.com/yyglw731>

Quantum Topology and Geometry.

11 – 15 May 2020, Luminy, France.
<https://conferences.cirm-math.fr/2160.html>

Intensive Period on Poisson Geometry and Mathematical Physics.

18 May–17 July 2020, Fisciano, Italy.
<http://www.poisson.unisa.it>

Job offers, fellowships and supports

Ph.D. offers

PhD student position.

University of Munster, Munster, Germany
Closing date: 31 December 2019.

<https://euro-math-soc.eu/job/phd-student-positionsalary-scale-13-tv-1-75-1>

PhD position in Geometry.

University of Fribourg, Fribourg, Switzerland
Closing date: 31 December 2019.

<https://euro-math-soc.eu/job/phd-position-geometry-3>

Doctoral Researcher in optimal transport.

Department of Mathematics, Technische Universität München
Closing date: 31 December 2019.

https://euro-math-soc.eu/system/files/job-announcements/Schmitzer_Doc.pdf

PhD position.

Georg-August-Universität Göttingen, Göttingen, Germany
Closing date: 11 January 2020.

<http://www.uni-goettingen.de/en/2794.html?cid=100625>

‘La Caixa’ PhD positions.

ICMAT, Madrid, Spain

Closing date: 4 February 2020.

https://www.icmat.es/resources/employment/INPhINIT_La-Caixa

PhD positions in mathematics.

University of Luxembourg, Luxembourg
Closing date: 1 March 2020.

<http://recruitment.uni.lu/en/details.html?nPostingId=25556&nPostingTargetId=41799>

PhD positions.

TU Delft, Delft, The Netherlands
Closing date: Open until filled.

<https://tinyurl.com/yyzhqhf>

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

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

<https://tinyurl.com/y6731flx>

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>

Doctoral candidate in applied algebraic geometry.

Aalto University, Espoo, Finland

Closing date: Open until filled.

<https://tinyurl.com/y298aqpp>

Postdoctoral fellowships

Postdoctoral positions in mathematics and theoretical physics.

Euler International Mathematical Institute,
St.Petersburg, Russia

Closing date: 31 December 19.

<https://tinyurl.com/y3cv3fab>

Postdoctoral Fellowship in Representation Theory.

Laboratoire de Mathematiques Blaise Pascal,
Clermont-Ferrand, France

Closing date: 15 January 2020.

<https://tinyurl.com/tq286b4>

Postdoc position in optimal control of PDEs.

University of Graz, Graz, Austria

Closing date: 15 January 2020.

<https://mathematik.uni-graz.at/index.php?id=39381>

Postdoctoral Fellows in Mathematics.

National Center for Theoretical Sciences, Taiwan

Closing date: 28 February 2020.

http://www.ncts.ntu.edu.tw/news_detail.php?id=75

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/>

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

Assistant Professor in dynamical systems.

Vrije Universiteit Amsterdam, Amsterdam, Netherlands

Closing date: 10 December 2019.

<https://workingat.vu.nl/ad/analysis-and-dynamical-systems/g9plvf>

Associate Professor in Mathematical Physics.

Mathematics Department of Radboud University, Nijmegen, The Netherlands

Closing date: 6 January 2020.

<https://www.ru.nl/english/working-at/vacature/details-vacature/?recid=1072081>

Professor in Applied Mathematics.

Karlstad University, Karlstad, Sweden

Closing date: 15 January 2020.

<https://euro-math-soc.eu/job/professor-mathematics-focus-applied-mathematics>

Several Tenure Track positions.

TU Delft, Delft, The Netherlands

Closing date: Open until filled.

<https://www.tudelft.nl/en/3me/departments/de-lft-center-for-systems-and-control/about-dc-sc/vacancies/>

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>

Offers for visiting researchers

ICTP-INdAM Research in Pairs.

International Centre for Theoretical Physics and the Istituto Nazionale di Alta Matematica.

Projects between mathematicians from developing countries and INdAM or ICTP members.

Closing date: 12 January 2020.

<https://tinyurl.com/t2sd9t8>

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.

<https://tinyurl.com/t7dfjel>

Focused research groups in Banff, Canada.

Banff International Research Station, Canada.

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

Closing date: Minimum 4 months before 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: Minimum 4 months before the event.

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>

<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.

Closing date: Open all year.

<https://tinyurl.com/y5vnhxj6>

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 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://tinyurl.com/un8bd4t>

Small team visiting the Centre de Recerca Matemàtica.

CRM, 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 1st and October 15..

<http://tinyurl.com/msri-htw>

Summer Graduate Schools at MSRI.

Mathematical Sciences Research Institute, Berkeley, United States.

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

<http://tinyurl.com/msri-sgs>

European Researchers' Night 2020.

European Commission, Marie Skłodowska-Curie Actions.

Deadline: January, 9.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-night-2020>

Innovative Training Networks 2020.

European Commission, Marie Skłodowska-Curie Actions.

Deadline: January, 14.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-itn-2020>

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, United States of America.

Deadline: No precise deadline.

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

Hosting a workshop at AIMS South Africa.

Contributions for workshops about AIMS's research focus areas.

Deadline: No precise deadline.

<https://tinyurl.com/y8p3t34j>

International Mathematical Union-Conference support program.

For conferences in developing or economically disadvantaged countries.

Deadline: Several calls.

<https://tinyurl.com/yycetfcz>

Preprints and papers

Network's members

Julia Lange and Javier de Lucas: *Geometric models for Lie-Hamilton systems on \mathbb{R}^2 .*

1911.01094

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

Robert Cardona, Eva Miranda, Daniel Peralta-

Salas and Francisco Presas: *Universality of Euler flows and flexibility of Reeb embeddings.*

1911.01963

[math.DS, math.AP, math.SG]

Tor Anderson and Sonia Martínez: *Distributed*

Optimal Power Dispatch of On/Off Devices via Newton-like Neural Network Dynamics.

1911.02111

[math.OC]

José Fernández Núñez, Wifredo García Fuertes and Askold M. Perelomov: *A note on Franel numbers and $SU(3)$.*

1911.04346

[math-ph, math.MP]

Boris Khesin, Sergei Kuksin and Daniel Peralta-Salas: *Global, local and dense non-mixing of the 3D Euler equation.*

1911.04363

[math.DS, math.AP]

Manuel de León, Víctor Manuel Jiménez and Manuel Lainz Valcázar: *Contact Hamiltonian systems with nonholonomic constraints.*

1911.05409

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

Eduardo Martínez: *On the construction of the linearization of a nonlinear connection.*

1911.05773

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

Oğul Esen, Manuel de León, Cristina Sardón and Marcin Zajac: *The globalization problem of the Hamilton-DeDonder-Weyl equations on a local k-symplectic framework.*

1911.05962

[math-ph, math.MP]

Santiago Capriotti, Jordi Gaset, Narciso Román-Roy and Leandro Salomone: *Griffiths Variational Multisymplectic Formulation for Lovelock Gravity.*

1911.07278

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

Kurusch Ebrahimi-Fard and Frederic Patras: *From iterated integrals and chronological calculus to Hopf and Rota-Baxter algebras.*

1911.08766

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

Dan Li, Dariush Fooladivanda and Sonia Martínez: *Data-driven Variable Speed Limit Design with Performance Guarantees for Highways.*

1911.10184

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

Network's collaborators

Samuel Lin, Benjamin Schmidt and Craig Sutton: *Geometric structures and the Laplace spectrum, part II.*

1910.14118

[math.DG, math.SP, 53C20, 58J50]

Andreas Fring and Takanobu Taira: *Pseudo-Hermitian approach to Goldstone's theorem in non-Abelian non-Hermitian quantum field theories.*

1911.01405

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

Andrzej J. Maciejewski and Tomasz Stachowiak: *A novel approach to the spectral problem in the two photon Rabi model.*

1911.01965

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

Francisco Torres de Lizaaur: *Periodic orbits of analytic Euler fields on 3-manifolds.*

1911.01967

[math.DG, math.AP, math.DS]

Simon Hochgerner: *Symmetry actuated closed-loop Hamiltonian systems.*

1911.02339

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

Gabriel Álvarez, Luis Martínez Alonso, Elena Medina and Juan Luis Vázquez: *Separatrices in the Hamilton-Jacobi Formalism of Inflation Models.*

1911.04750

[math-ph, math.MP]

Benedetto Piccoli, Andrea Tosin and Mattia Zanella: *Model-based assessment of the impact of driver-assist vehicles using kinetic theory.*

1911.04911

[nlin.AO, math.OC, physics.soc-ph]

Gianluca Bande, Beniamino Cappelletti Montano and Andrea Loi: *η -Einstein Sasakian immersions in non-compact Sasakian space forms.*

1911.05511

[math.DG]

Zhou Fang, Arjan van der Schaft and Chuanhou Gao: *A graphic formulation of non-isothermal chemical reaction systems and the analysis of detailed balanced networks.*

1911.07338

[math.DS]

E. Celeghini, M. Gadella and M. A. del Olmo: *Groups, Jacobi functions and rigged Hilbert spaces.*

1911.08767

[math-ph, math.MP]

Alejandro Cañas, Vicente Muñoz, Juan Rojo and Antonio Viruel: *A K -contact simply connected 5-manifold without Sasakian structure.*

1911.08901

[math.DG, math.AG, math.SG]

Leandro Lichtenfelz, Gerard Misiolek and Stephen C. Preston: *Axisymmetric diffeomorphisms and ideal fluids on Riemannian 3-manifolds.*

1911.10302

[math.DG]

David Gómez-Ullate, Yves Grandati and Robert Milson: *Corrigendum on the proof of completeness for exceptional Hermite polynomials.*

1911.10602

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

M. Sigalotti: *Bounds on time-optimal concatenations of arcs for two-input driftless 3D systems.*

1911.10811

[math.OC]

Partha Guha and A Ghose-Choudhury: *Construction of the classical time crystal Lagrangians from Sisyphus dynamics and duality description with the Liénard type equation.*

1911.11626

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

Network's news

PhD Thesis.

Material Geometry.

Author: Víctor Manuel Jiménez Morales.

Advisors: Manuel de León and Marcelo Epstein.

Date: 15 November 2019.

https://drive.google.com/open?id=1-dQMJNZebHz_pUgDnt5DYyf0khm_PQEX

PhD Thesis.

Lorentzian Poisson homogeneous spaces, quantum groups and noncommutative spacetimes.

Author: Iván Gutiérrez-Sagredo.

Advisors: Ángel Ballesteros and Francisco J. Herranz.

Date: 22 November 2019.

Links of interest

The Geometry, Mechanics and Control Network.

International, spanish based research network.

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

Journal of Geometric Mechanics (JGM).

Volume 11, Issue 4, 2019.

<https://www.aimsocieties.org/journal/1941-4889/2019/11/4>

International Mathematical Union-Net 98.

November 2019.

<https://www.mathunion.org/fileadmin/IMU/Organization/imu-net/pdfs/2019/IMU-Net-98.pdf>

ICMAT Newsletter.

18th number. First semester 2019.

<https://www.icmat.es/outreach/newsletter/nm18>

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>

European Research Council.

Supporting top researchers from anywhere

<https://erc.europa.eu/>

International Cooperation "Open to the World".

Research and Innovation, European Commission

<https://tinyurl.com/y46tkeeq>

International Center of Pure and Applied Mathematics (CIMPA).

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

- Reports@SCM journal.**
<http://revistes.iec.cat/index.php/reports/>
- Mathematics in Europe.**
<http://www.mathematics-in-europe.eu/>
- 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.**
<http://academicpositions.eu/>
- Academic jobs in Mathematics in the UK.**
<http://www.jobs.ac.uk/categories/postdoc-jobs>
- Academic jobs in Mathematics worldwide.**
<https://www.postdocjobs.com/>
- Academic jobs in Mathematics in Spain.**
<http://www.madrimasd.org/madrid-ciencia-tecnologia/convocatorias>
- Academic jobs in Mathematics.**
<http://www.indeed.com/q-Postdoctoral-jobs.html>
- 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/ycjpvz6>
- 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>
- Mathematical Association of America Awards.**
<https://www.maa.org/programs-and-communities/member-communities/maa-awards/writing-awards>
- Association for Women in Mathematics Awards.**
<https://awm-math.org/awards/>
- IEEE Control Systems Society Awards.**
<http://ieeecss.org/awards/awards-program>
- Royal Society of London Premier Medals and Awards.**
<https://royalsociety.org/grants-schemes-awards/awards/premier-awards/>
- London Mathematical Society Prizes.**
<https://www.lms.ac.uk/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