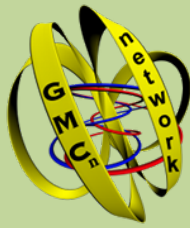


# GMC Network Infosheet

October 2019



## Geometry, Mechanics and Control Network Infosheet

October 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

### Dirac operators in differential geometry and global analysis.

6–12 October 2019, Bedlewo, Poland.

<http://http://wmii.uwm.edu.pl/dirac/>

### Colombian Conference on Automatic Control.

15–18 October 2019, Medellín, Colombia.

<http://www.ieeeccac2019.com/>

### Dynamics, Geometry and Combinatorics.

21–25 October 2019, Lausanne, Switzerland.

<https://bernoulli.epfl.ch/events/1489>

### Modern Problems of Mathematics and Mechanics.

23–25 October 2019, Baku, Azerbaijan.

<https://imm60.imm.az/>

### International Congress Geometric Analysis at UCA.

28–31 October 2019, Cádiz, Spain.

<http://iemath.ugr.es/dc2019/#event>

### Algebraic and Geometrical Methods in String Theory.

28 October–8 November 2019, San Martín, Argentina.

<http://icas.unsam.edu.ar/hub/cimpa2019/>

### Dirac operators on domains with magnetic fields.

28 October–8 November 2019, Luminy, France.

<https://conferences.cirm-math.fr/2240.html>

### Workshop on Contact and Poisson Geometry.

31 October–2 November 2019, Timisoara, Romania.

<https://sites.google.com/view/wcpg>

### 7th International Conference on Control, Mechatronics and Automation.

6–8 November 2019, Delft, Netherlands.

<http://icma.org/>

### Differential Geometry and Nonassociative Algebras.

12–15 November 2019, Luminy, France.

<https://conferences.cirm-math.fr/2076.html>

### **Workshop on Higher Structures in Geometry and Physics.**

18–22 November 2019, Montreal, Canada.  
<https://tinyurl.com/y6rvpcpb>

### **IX Conference on Quantum Foundations.**

27–29 November 2019, Córdoba, Argentina.  
<https://sites.google.com/view/ixjfc>

### **Symplectic Geometry with Algebraic Techniques with applications to Mathematical Physics.**

10–13 December 2019, Madrid, Spain.  
<https://tinyurl.com/y6krqnm9>

### **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>

### **Introductory Workshop: Quantum Symmetries.**

27–31 January 2020, Berkeley, USA.  
<http://www.msri.org/workshops/906>

### **Symplectic Geometry, Contact Geometry and Interactions.**

6–8 February 2020, Antwerpen, Belgium.  
<https://tinyurl.com/y67nzdke>

### **Group Actions in Arithmetic 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://sites.google.com/view/ifthm-gnd/star-tseite>

### **Tensor categories and topological quantum field theories.**

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

## **Job offers, fellowships and supports**

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### **Ph.D. offers**

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#### **PhD position in numerical methods.**

Universidad Politecnica de Madrid, Madrid, Spain

**Closing date: 7 November 2019.**

<https://blogs.upm.es/ddcampayo/2019/10/21/oferta-de-contrato-fpi/>

#### **PhD position in Optimal Control.**

University of Klagenfurt, Klagenfurt, Austria

**Closing date: 13 November 2019.**

<https://jobs.aau.at/en/job/predoc-scientist-or-postdoc-assistant-f-m-non-tenure-track/>

#### **PhD positions in Mathematics.**

Berlin Mathematical School, Berlin, Germany

**Closing date: 1 December 2019.**

[https://euro-math-soc.eu/system/files/job-announcements/BMS\\_PhD\\_Call\\_2019.pdf](https://euro-math-soc.eu/system/files/job-announcements/BMS_PhD_Call_2019.pdf)

#### **PhD in Numerical Linear Algebra.**

Charles University, Praha, Czech Republic

**Closing date: 1 December 2019.**

<https://www.karlin.mff.cuni.cz/~carson/primusjobs.html>

#### **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-l-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](https://euro-math-soc.eu/system/files/job-announcements/Schmitzer_Doc.pdf)

### **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/yyzhqhfr>

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

University of Luxembourg, Luxembourg

**Closing date: Open until filled.**

<https://tinyurl.com/y673lflx>

### **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**

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### **Postdoctoral positions in mathematics.**

IHES, Bures-sur-Yvette, France

**Closing date: 25 November 2019.**

<https://www.ihes.fr/en/applications/post-docs/carmin-programme/>

### **Postdoctoral positions in mathematics and theoretical physics.**

Euler International Mathematical Institute, St.Petersburg, Russia

**Closing date: 31 December 19.**

<https://tinyurl.com/y3cv3fab>

### **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?nid=75](http://www.ncts.ntu.edu.tw/news_detail.php?nid=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.icerp.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

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### Faculty Position in Mathematics.

EPFL, Lausanne, Switzerland

Closing date: 1 November 2019.

<https://facultyrecruiting.epfl.ch/auth/Apply/0/Position/18186242/Step/1>

### Professor of Algebra.

University of Graz, Graz, Austria

Closing date: 6 November 2019.

<https://euro-math-soc.eu/job/professor-algebra>

### Lecturer in Computational Mathematics.

University of Melbourne, Melbourne, Australia

Closing date: 8 November 2019.

<http://jobs.unimelb.edu.au/caw/en/job/900384/lecturer-in-applied-mathematics-computational>

### Professor in Mathematics/Algebra.

Vrije Universiteit Brussel, Brussels, Belgium

Closing date: 1 December 2019.

<https://jobs.vub.be/job/Elsene-Professor-MathematicsAlgebra/560448701/>

### 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>

### 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

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### 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: 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.

<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://www.educ.cam.ac.uk/about/visiting-scholars/>

### 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

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### 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](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 dis-

advantaged countries.

**Deadline: Several calls.**

<https://tinyurl.com/yycetfcz>

## Preprints and papers

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### Network's members

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Yorai Wardi, Carla Seatzu, Jorge Cortés, Magnus Egerstedt, Shashwat Shivam and Ian Buckley: *Tracking Control by the Newton-Raphson Method with Output Prediction and Controller Speedup.*

1910.00693

[math.OC]

Eduardo Fernández and Fabio Gironella: *A remark on the contactomorphism group of over-twisted contact spheres.*

1910.01359

[math.SG]

Jordi Gaset and Narciso Román-Roy: *Multisymplectic formulation of Lagrangian models in gravitation.*

1910.01521

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

Oğul Esen, Manuel de León, Cristina Sardón and Marcin Zając: *Hamilton-Jacobi Formalism on Locally Conformally Symplectic Manifolds.*

1910.02016

[math-ph, math.MP]

Madeleine Jotz Lean: *Infinitesimal ideal systems and the Atiyah class.*

1910.04492

[math.DG]

Rama Seshan Chandrasekaran, Leonardo J. Colombo, Margarida Camarinha, Ravi Banavar and Anthony Bloch: *Variational collision and obstacle avoidance of multi-agent systems on Riemannian manifolds.*

1910.04995

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

Florio M. Ciaglia, Fabio Di Cosmo, Alberto Ibort and Giuseppe Marmo: *Descriptions of Relativistic Dynamics with World Line Condition.*

1910.06447

[math-ph, math.MP]

### Network's collaborators

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Ugo Boscain, Eugenio Pozzoli and Mario Sigalotti: *Classical and quantum controllability of a rotating 3D symmetric molecule.*

1910.01924 (version 2)

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

Nathan Duignan, Richard Moeckel, Richard Montgomery and Guowei Yu: *Chazy-Type Asymptotics and Hyperbolic Scattering for the n-Body Problem.*

1910.05871

[math.DS]

Julia Cen, Francisco Correa and Andreas Fring: *Nonlocal gauge equivalence: Hirota versus extended continuous Heisenberg and Landau-Lifschitz equation.*

1910.07272

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

Kamel Bencheikh and Luis M. Nieto: *Exact results for nonequilibrium dynamics in Wigner phase space.*

1910.07403

[cond-mat.quant-gas, math-ph, math.MP, quant-ph]

Yannick Guedes Bonthonneau, Nicolas Raymond and San Vũ Ngoc: *Exponential localization in 2D pure magnetic wells.*

1910.09261

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

Jyotishman Bhowmick, Debashish Goswami and Giovanni Landi: *On the Koszul formula in non-commutative geometry.*

1910.09306

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

Florio M. Ciaglia, Fabio Di Cosmo, Giuseppe Marmo and Luca Schiavone: *Evolutionary equations and constraints: Maxwell equations.*

1910.09654

[math-ph, math.MP]

Andrzej J. Maciejewski and Tomasz Stachowiak:  
*Level crossings and new exact solutions of the two-photon Rabi model.*  
1910.11037  
[quant-ph, math-ph, math.MP]

David Gómez-Ullate, Yves Grandati, Zoe McIntyre and Robert Milson: *Ladder operators and rational extensions.*  
1910.12648  
[math-ph, math.MP, quant-ph]

## Links of interest

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### The Geometry, Mechanics and Control Network.

International, spanish based research network.  
<http://gmcnet.webs.u11.es/>

### Journal of Geometric Mechanics (JGM).

Volume 11, Issue 3, 2019.  
<https://aimsciences.org/journal/1941-4889/2019/11/3>

### International Mathematical Union-Net 97.

September 2019.

<https://www.mathunion.org/fileadmin/IMU/Organizati%20ion/imu-net/pdfs/2019/IMU-Net-97.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/ydcpzmv7>

### 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](mailto:gmactivities@gmail.com)**