

#### Geometry, Mechanics and Control Network Infosheet

#### October 2016

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#### CONTENTS

Network's activities

Job offers, fellowships and awards

Ph.D. Offers ... 1

Postdoctoral offers ... 2

Offers for senior researchers ... 4

Visiting researchers ... 5

Awards ...7

Financial support for research projects and conferences ... 7

Interesting news and publications

Network's members 9 and collaborators 9 preprints and papers

Other conferences 10

### **GMC** Network Infosheet

#### October 2016

#### Network's activities

### 11th Young Researchers workshop on Geometry, Mechanics and Control.

12-14 January 2017, Tenerife, Islas Canarias, Spain.

#### Courses:

Nicola Sansonetto (University of Verona, Italy): Integrability and Nonholonomic Systems with Symmetry.

Marco Caponigro (CNAM, Conservatoire National des Arts et Mtiers, Paris, France): Stabilization and optimal control in multiagent dynamics.

Alejandro Cabrera (UFRJ, Rio de Janeiro, Brasil): Introduction to supergeometry.

http://gmcnet.webs.ull.es/?q=activity-detail1/1762

### 5th Iberoamerican conference on Geometry, Mechanics and Control.

16-20 January 2017, Tenerife, Islas Canarias, Spain. http://5ibamgmc.webs.ull.es/

### Special Session of the Biennial of the Royal Mathematical Society.

31 January 2017, Zaragoza, Spain.

http://eventos.rsme.es/4762/detail/congreso-bienal-de-la-real-sociedad-matematica-espanola.html

#### Job offers, fellowships and awards

#### Ph.D. offers

#### PhD Intern - Optimization of Infrastructure Networks.

This project will investigate the development of control algorithms to verify that critical safety constraints are not violated when a control algorithm is plugged in to a detailed model of an infrastructure network.

Pacific Northwest National Laboratory (Washington, United States).

Closing date: 3 November 2016.

http://www.all-acad.com/Job/C1819410

### Phd Studentship: Nanoscale Interfacial Fluid Dynamics.

The aim of the project is to develop novel fundamental theory in fluid dynamics and/or molecular dynamics.

University of Edinburgh (United Kingdom).

Closing date: 8 November 2016. http://www.jobs.ac.uk/job/A0I381

#### PhD Position in Mathematics, Chair for Numerical Analysis and Scientific Computing.

The project offering the grant focuses on the study of numerical methods for Riemann-Hilbert problems from mathematical physics and integrable systems in geometry.

Technical University of Munich (Germany).

Closing date: 30 November 2016.

http://www.all-acad.com/Job/J0223060

#### PhD Studentship in Cooperative Control.

The goal of the PhD studentship is to develop methods for designing distributed controllers for multi-agent systems.

Department of Aeronautic, Imperial College London (United Kingdom).

Closing date: 1 December 2016. http://www.jobs.ac.uk/job/AON163

### PhD Studentship - Information geometry of controlled quantum open systems.

This PhD project aims to further expand our understanding of open dynamics by exploiting new insights from complementary areas such as non-equilibrium statistical mechanics, quantum control, quantum information and quantum metrology.

University of Nottingham (United Kingdom).

#### Closing date: 9 January 2017.

http://www.all-acad.com/Job/J0221543

### PHD Studentship - Bifurcations in symmetric Hamiltonian systems.

In this project a general theory for bifurcations of relative equilibria and relative periodic orbits will be developed for Hamiltonian systems with symmetry. The project involves knowledge in Lagrangian and Hamiltonian systems, dynamical systems, Lie group theory and basic differential geometry.

University of Surrey (United Kingdom).

Closing date: 10 January 2017. http://www.jobs.ac.uk/job/AUT233/

### Doctoral Candidates (PhD students) in Systems Biomedicine.

Diverse approaches to the study of catastrophic events will be employed, including control theory, statistical analysis, mathematical modelling, and theory development.

University of Luxembourg (Luxembourg).

Closing date: Open until filled.

http://www.all-acad.com/Job/J0214875

#### PhD position in Numerical Methods.

4-year position in the project 'Numerical methods in the representation of curves and surfaces, positive matrices and applications', supervised by professor Juan Manuel Peña Ferrández. Details of the position are stablished by the Spanish Ministry of Economy and Competitivity (see B.O.E. 8/11/2016, in Spanish).

Departamento de Matemática Aplicada, Universidad de Zaragoza (Zaragoza, Spain).

Closing date: Open until filled.

jmpena@unizar.es

#### Postdoctoral fellowships

### Dynamic Optimization and Control Theory.

This research focuses on the utilization of nonconvex, non-smooth optimization techniques to solve nonlinear time variant problems of importance to the Air Force.

Air Force Institute of Technology (Ohio, US).

#### Closing date: 1 November 2016.

http://nrc58.nas.edu/RAPLab10/Opportunity/Opportunity.aspx?LabCode=13&ROPCD=135000&RONum=B7598

### Control of Quantum Open Systems and Networks.

The research involves the modelling and control of quantum systems that are subjected to noise from their environments.

Computational and Information Sciences Directorate (Maryland, United States).

#### Closing date: 1 November 2016.

http://nrc58.nas.edu/RAPLab10/Opportunity/Opportunity.aspx?LabCode=76&ROPCD=763602&RONum=B8338

### Postdoctoral fellow in Harmonic Analysis and Differential Equations.

This project seeks to propose new challenges and develop original analytical tools that, if carried out, would entail significant progress on different aspects of some fundamental Partial Differential Equations of Mathematical Physics.

BCAM - Basque Center for Applied Mathematics (Spain).

Closing date: 4 November 2016.

http://www.bcamath.org/en/research/job/ic2016-autumn-postdoctoral-fellow-in-harmonic-analysis-and-differential-equations

### Research Associate in the Dynamics Group.

The Research Associate will be involved in a project to develop efficient reduced order modelling method for nonlinear vibration.

Imperial College London (United Kingdom).

Closing date: 8 November 2016.

https://www4.ad.ic.ac.uk/OA\_HTML/OA.jsp?OAFunc=IRC\_VIS\_VAC\_DISPLAY&OAMC=R&p\_svid=50027

#### Postdoctoral Research Associate.

Founded fellowship in one of the research fields, such as differential equations, dynamical systems and geometry.

Arizona State University (Arizona, United States).

Closing date: 30 November 2016.

https://www.mathjobs.org/jobs/jobs/9189

### Post-doctoral and mid-carrer positions at Princeton.

Several positions at the Institute for Advanced Study School of Mathematics.

Princeton (New Jersey, United States).

Closing date: 1 December 2016.

https://www.mathjobs.org/jobs/jobs/8781

#### MSRI Post-doctoral fellowships.

For 2017-18, MSRI will appoint 7-10 post-doctoral fellows to each of its programs.

Mathematical Science Research Institute.

Closing date: 1 December 2016.

http://www.msri.org/web/msri/scientific/member-application/postdoctoral-fellow

### Post-doctoral position at the Chair of Algebraic Geometry.

Applicants are expected to conduct research in algebraic geometry, or in a topic in another field very closely related to the interests of the Chair of Algebraic Geometry.

École polytechnique fédérale de Lausanne (Switzerland).

Closing date: 1 December 2016.

https://www.mathjobs.org/jobs/jobs/9288

#### AXA Post-doctoral fellowships.

25 post-doctoral grants for an 18 to 24 month period.

AXA Research Found.

Closing date: 6 December 2016.

https://www.axa-research.org/en/page/post-doctoral-fellowships

### Postdoctoral fellowship positions 2016 from the European P-SPHERE project.

3 year postdoctoral fellowship on Geometrical Analysis and Partial Differential Equations. Barcelona Graduate School of Mathematics (Spain).

Closing date: 9 December 2016.

http://bgsmath.cat/psphere-2016/

#### Postdoctoral researcher ERC GEOFLU-IDS.

The candidate will join the team funded by the ERC Starting Grant project Geometric problems in PDEs with applications to fluid mechanics.

ICMAT (Madrid, Spain).

Closing date: 15 December 2016.

https://www.icmat.es/job-opportunities/postdoc/geofluids

#### POLONEZ 3 postdoctoral fellowships.

Funding programme addressed to incoming researchers who may apply for 12- or 24-month fellowships in host institutions in Poland.

National Science Centre (Poland).

Closing date: 15 December 2016.

http://www.ncn.gov.pl/polonez?language=en

#### Postdoctoral fellowship grants.

The scientific areas for the year's two programs are: Fractal Geometry and Dynamics, and Tropical Geometry, Amoebas and Polytopes.

Institut Mittag-Leffler (Sweden).

Closing date: 8 January 2017.

http://www.mittag-leffler.se/research-programs/postdoctoral-fellowship-grants

#### Postdoctoral position in Mathematics.

The applicant will study the interactions between Symplectic geometry, topology and microlocal sheaf theory.

France.

Closing date: 1 February 2017.

https://www.mathjobs.org/jobs/jobs/8433

#### ETH Zurich Postdoctoral Fellowships.

Junior Postdoctoral Researchers.

ETH Zurich (Switzerland).

Closing date: 1 March 2017.

https://www.ethz.ch/en/research/research-prom otion/eth-internal-programmes/eth-fellowship s.html

#### Humboldt Research Fellowship for Postdoctoral Researchers.

6-24 month research programs.

Alexander von Humboldt Foundation.

Closing date: Open.

https://www.humboldt-foundation.de/web/humbol

dt-fellowship-postdoc.html

#### Lisa Meitner Program.

FWF Austrian Science Fund.

Vienna (Austria).

Closing date: Open.

https://www.fwf.ac.at/en/research-funding/ap

plication/

#### Funded postdoctoral fellowship.

Department of Mathematics and Statistics.

University of Reading.

Closing date: Open.

https://www.reading.ac.uk/maths-and-stats/Jo bsAndFellowships/maths-fellowships.aspx

#### Offers for researchers

#### Associate/Assistant Professor in Mathematics.

Department of Mathematics, College of Letters and Science.

University of Wisconsin (Wisconsin, United States).

Closing date: 1 November 2016.

http://www.all-acad.com/Job/J0209500

#### Senior Lecturer in Mathematics.

School of Mathematical Sciences.

Queen Mary University of London (United Kingdom).

Closing date: 2 November 2016.

http://www.all-acad.com/Job/C1834754

#### Assistant Professor.

Department of Mathematical Sciences.

Binghamton University (New York, United

Closing date: 7 November 2016 or until filled.

https://www.mathjobs.org/jobs/jobs/9300

#### One fixed term researcher position in Geometry.

Department of Mathematics. University of Padua (Italy).

Closing date: 10 November 2016.

http://www.all-acad.com/Job/C1789971

#### Tenure Track - Frontiers of Geometry.

Department of Mathematics and Statistics.

University of Massachusetts (Massachusetts,

United States).

Closing date: 14 November 2016.

http://www.all-acad.com/Job/C1810923

#### Assistant Professor in Geometry.

Position for an assistant professor of mathematics with a speciality in Combinatorial/Discrete Geometry or Algebraic Geometry.

California State University (California, United States).

Closing date: 1 December 2016.

https://www.mathjobs.org/jobs/jobs/9292

#### Faculty positions in Mathematics at ICTS-TIFR, Bangalore.

International Centre for Theoretical Sciences.

Bangalore (India).

Closing date: 1 January 2017.

https://www.mathjobs.org/jobs/jobs/8896

#### Tenure track Assistant Professor in pure Mathematics.

Department of Mathematics.

University of Rochester (New York, United States).

Closing date: Open until filled.

http://www.all-acad.com/Job/J0218389

#### Two positions in Mathematics.

One assistant professor and one full professor at Facultad de Ciencias Exactas y Naturales y Agrimensura.

Universidad Nacional del Nordeste (Argentina).

Closing date: Open until filled.

lucini@exa.unne.edu.ar

#### Faculty positions in Mathematics.

Area of Mathematics.

Universidad Nacional de Tierra del Fuego (Ar-

Closing date: Open until filled.

fdobarro@untdf.edu.ar

### **AIM:** American Institute of Mathematics. SQUARES.

Groups of 4–6 researchers to spend a week at AIM in San Jose, California, with the possibility of returning in following years.

AIM will provide both the research facilities and the financial support for each SQuaRE group. We solicit SQuaREs in all areas of pure and applied mathematics. Preference is given to groups which contain a mix of junior and senior researchers, and to groups which have participants from North America. SQuaREs usually meet during weeks when there are no workshops at AIM.

Closing date: 1 November, 2016.

http://aimath.org/programs/squares/

#### Invitation Fulbright speakers.

Fulbright Commission.

Invitation to fulbright speakers for a period of 2-6 weeks for research and seminars in Spain.

Closing date: June 2017.

http://www.fulbright.es/convocatorias/ver/ 1512/ayudas-para-que-instituciones-espanola s-inviten-a-conferenciantes-fulbright-paraun-periodo-maximo-de-dos-semanas/2016-2017

#### Visiting research fellow in Oxford.

Mathematical Institute-University of Oxford. Visiting researchers at the University of Oxford. Closing date: Open.

https://www.maths.ox.ac.uk/members/visitors/visiting-research-fellows

### Visiting research fellow in Kent State University.

Mathematics Department-KSU Ohio.

Visiting researchers at KSU.

Closing date: Open.

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

#### Visiting researchers at AIMS.

African Institute for Mathematical Sciences. Interested researchers may apply to visit for short (2-week) or longer periods. Research fellows may conduct their own research at AIMS, participate in the teaching programmes and give talks in the journal club. Visits to local universities can be arranged.

Closing date: Open.

https://www.aims.ac.za/en/research-centre/fellowships

### Cheryl E. Praeger Visiting Research Fellowship.

University of Western Australia.

Recipients of the fellowship are expected to participate in education, e.g. via lectures, and to participate in collaborative research with members of the School of Mathematics and Statistics and the Centre for the Mathematics of Symmetry and Computation (CMSC) during a visit of at least two weeks.

Closing date: Annually open.

http://www.maths.uwa.edu.au/research/Visiting-Research-Fellowship

#### Aarhus Universitets.

Aarhus University Research Foundation.

Research in Denmark.

For visiting researchers collaborating with the Aarhus University.

Closing date: Open calls.

http://auff.au.dk/en/grants/application/

### Research in pairs in the Mathematisches Forschunginstitut Oberwolfach.

Mathematisches Forschunginstitut Oberwolfach. Oberwolfach, Germany.

2-4 people on research stay between 2 weeks and 3 months. Required: not all participants coming from the same place. The Institute will provide office space, full board and lodging. Travel expenses can be reimbursed only in exceptional cases.

Closing date: Applications must be sent 6 months before planned stay.

http://www.mfo.de/for-guest-researchers/apply-for-a-stay/apply-for-research-in-pairs

#### Focused research groups.

Banff International Researh Station.

Banff, Alberta, Canada.

Up to 8 researchers from different institutions to live and work at the BIRS facility for periods of 1 to 2 weeks.

Room and meals are provided for resident members. Two dedicated discussion rooms with computer work stations are provided for the use of the group. Proposals: Should detail the area of collaboration, list the team members and their institutions, and justify the case for using BIRS. Closing date: No precise deadline: a minimum of 4 months before the proposed start of the event.

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

#### Research in Teams.

Banff International Researh Station.

Banff, Alberta, Canada.

The Research in Teams program offers teams of 2 to 4 researchers the opportunity to live and work at the BIRS facility for periods of 1 to 2 weeks, in order to concentrate on their research or to finish major projects.

Closing date: No precise deadline: 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.

Marseille, France.

Research in pairs (2 to 3 researchers for 2 to 3 weeks. CIRM subsizes board and lodging for people not based in the region).

Closing date: Open all year.

http://www.cirm-math.com/rip-applicants.html

#### Call for Visiting Professors at CIRM.

Fondazione Bruno Kessler.

Trento University, Trento, Italy.

CIRM Visiting Scholars will perform mathematical research in cooperation with researchers of the Trento area. CIRM Visiting Professors will hold short Ph.D. courses, or series of seminars.

Closing date: Applications three months before planned stay.

http://cirm.fbk.eu/cirm-visiting-professors

#### Visiting the ICMAT.

ICMAT.

Madrid, Spain.

Host for researchers for a period 1 to 12 months, preferably having a research plan and a scientific connection with ICMAT researchers. Visitors will be provided with office space and working facilities and house-finding assistance if necessary. No financial support will be provided for these visits. Resolution no later that one month after submission.

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 University, Trento, Italy.

2-3 people from Universities located in different towns, who intend to work on a definite research project from 1 to 6 weeks). Applicant partners must submit a scientific project in the field of mathematics resulting in one or more scientific publications on journals of excellent mathematical level; Participants in the RIP Program will also give occasional research seminar talks at the CIRM or at the University of Trento. Applications where one or more of the partners are Italians will of course be welcome.

Closing date: Applications may be sent any time. http://cirm.fbk.eu/research-pairs

#### Visiting the CRM.

Centre de Recerca Matemàtica.

Catalonia, Spain.

Host for researchers from at least months, having a research plan and a scientific connection with long-term CRM visitors or researchers based at a university in Catalonia. Researchers from Catalan universities can apply if they are free from teaching duties during the period of their stay at the CRM. Visitors will be provided with working facilities and house-finding assistance. Support for housing expenses can be requested. Visits should be carried out during the academic year (from September to July). Resolutions no later than three months after submission.

Closing date: Applications can be submitted any time between 6 and 12 months before the start of the desired stay.

http://www.crm.cat/en/Host/VisitingCRM/Pages/ResearchPairs.aspx

#### Visiting the IMUS.

IMUS.

University of Sevilla, Spain.

Hosting researchers from 1 to 12 months. Priority to researchers having a research plan to be developed in collaboration with IMUS members. Visitors will be provided with facilities at the Institute and house-finding assistance. No financial support will be provided. Resolutions within one month after the submission.

Closing date: Applications can be submitted any time, from 2 months to 1 year in advance.

http://www.imus.us.es/es/contenido/intercall

#### The John von Neumann Lecture.

SIAM award to distinguished contributions in the field of Applied Mathematics.

Closing date: Nominations due fall 2016.

https://www.siam.org/prizes/pdf/poster\_16.pdf

#### AWM/SIAM Sonia Kovalevsky Lecture.

Scientific and engineering researchers whose work highlights achievement of women in Applied Mathematics and Computational Mathematics.

Closing date: Nominations due fall 2016.

https://www.siam.org/prizes/pdf/poster\_16.pdf

#### Ralph E. Klein prize.

One individual for outstanding research bridging the gap between math and applications.

Closing date: Nominations due fall 2016.

https://www.siam.org/prizes/pdf/poster\_16.pdf

#### Germund Dahlquist prize.

Contributions to numerical solutions of differential equations and scientific computing.

Closing date: Nominations due fall 2016.

https://www.siam.org/prizes/pdf/poster\_16.pdf

#### James H. Wilkinson prize.

Numerical analysis and scientific computing. Closing date: Nominations due fall 2016.

https://www.siam.org/prizes/pdf/poster\_16.pdf

#### W.T. and Idalia Reid prize.

Differential equations and Control theory. Closing date: Nominations due fall 2016.

https://www.siam.org/prizes/pdf/poster\_16.pdf

#### Humphreys Award.

Award for mentorship of undergraduate women in Mathematics.

Closing date: April 30, Year N for the Year N+1 Award.

https://sites.google.com/site/awmmath/programs/humphreys-award

#### Abdus Salam Medal.

The world Academy of Science of developing countries.

Closing date: No precise deadline.

http://twas.org/opportunity/abdus-salam-meda

#### SIAM student paper prize.

The SIAM Student Paper Prize is awarded every year to the student author(s) of the most outstanding paper(s) submitted to the SIAM Student Paper Competition.

Closing date: February 2017.

https://www.siam.org/prizes/nominations/nom\_student.php

#### ECCOMAS young investigators awards.

For young scientists in the field of Computational Engineering/Mathematical Sciences.

Closing date: December 2017.

http://www.eccomas.org/vpage/1/2/Young-Investigators-Awards

#### Financial support for research projects and conferences

### Financial support for workshop organization.

American Institute of Mathematics.

Deadline: November 1, 2016.

http://aimath.org/workshops/proposalguide/

### Financial support for attendance to conferences.

RSME.

Deadline: 30 March-30 September every year. http://www.rsme.es/content/blogcategory/64/117/

### Financial support for workshop organization.

Banff International Research Station.

Deadline: No preceise deadline but notification with months in advance.

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

#### Research Professionals.

Based in London, Research Professional provides an international option for people seeking research-funding programs. A paid subscription is required for access.

Deadline: No precise deadline.

http://www.researchresearch.com/

#### The Royal Society Grants.

Fund about 1500 researchers, including approximately 600 research fellows, through grant schemes.

Deadline: No precise deadline.

https://royalsociety.org/grants/

### International Mathematical Union-Conference support program.

Commision for developing countries. This program gives partial support (max. EURO 3,500) to conferences in the mathematical sciences The funds are for academic use only (travel or living expenses of invited speakers or participants coming from developing countries).

Deadline: No precise deadline but 4 months in advance to the Grant Selection.

http://www.mathunion.org/cdc/grants/conference-support-program/

### Financial support for organizing scientific conferences.

Conference grants by the Swiss National Science Foundation are aimed at researchers who wish to organise a scientific conference which is highly relevant to Swiss research. The conference must take place in Switzerland or at a recognised Swiss research centre abroad.

Deadline: All year round.

http://www.snf.ch/en/funding/science-communic ation/scientific-conferences/Pages/default.a spx

#### Hosting a workshop at AIMS South Africa.

AIMS South Africa will make a contribution to the cost of the workshop provided that funding is available, and that the workshop falls within one of its research focus areas.

Deadline: No precise deadline.

https://www.aims.ac.za/en/research-centre/workshops-conferences/hosting-a-workshop-at-aims

#### Interesting news and publications

#### Journal of Geometric Mechanics (JGM).

Volume 8, Number 3, September 2016.

https://aimsciences.org/journals/home.jsp?journalID=17

#### IMU-Net 79.

September 2016.

http://www.mathunion.org/imu-net/archive/2016/imu-net-079/

#### ICMAT Newsletter.

12th number.

http://www.icmat.es/outreach/newsletter/num12

#### New AIMS Journal.

New open access journal.

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

#### Reports@SCM.

Reports@SCM is a non-profit electronic research journal on Mathematics published by the Societat Catalana de Matemàtiques (SCM) which originated from the desire of helping students and young researchers in their first steps into the world of research publication.

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

#### Jobs for Mathematicians.

Academic and other math jobs https://www.mathjobs.org/jobs

#### Women and Math.

http://mym.rsme.es/

### 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/

#### Matemáticas y sus fronteras.

http://weblogs.madrimasd.org/matematicas/

### Online textbooks: MIT OPEN COURSE-WARE.

Online textbooks by department

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

#### Free online courses in Mathematics.

Free online courses of reputable North American Universities

https://www.edx.org/course?search\_query=math ematics

### Search of academic jobs in Mathematics in Europe.

Look for PhD, post doc positions, research assistant, etc.

http://academicpositions.eu/

### Search of academic jobs in Mathematics in the UK.

Look for PhD, post doc positions, research assistant, etc

http://www.jobs.ac.uk/categories/postdoc-jobs

#### Search of academic jobs in Mathematics worldwide.

Look for PhD, post doc positions, research assistant, etc

http://www.findapostdoc.com/,https://www.postd ocjobs.com/

#### Search of academic jobs in Mathematics in Spain.

Look for PhD, post doc positions, research assistant, vacant jobs, lectureships

http://www.indeed.com/q-Postdoctoral-jobs.htm 1,http://www.madrimasd.org/

#### Courses online of Mathematics, Physics and other disciplines.

Courses from 62 universities.

https://www.coursera.org/courses?orderby=upco ming

#### Advice for New Ph.D.'s.

http://www.ams.org/profession/career-info/n ew-phds/new-phds

#### The American Mathematical Society bookstore.

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

#### Network's members preprints and papers

Alberto Ibort, Alberto López-Yela and Julio Moro: SMILY: A numerical algorithm to decompose unitary representations and compute Clebsch-Gordan coefficients.

1610.01054

[math-ph, math.MP, 81]

Daniel M. Kane, Joseph Palmer and Alvaro Pelayo: Minimal models of compact symplectic semitoric manifolds.

1610.05423

[math.SG, math.DG]

Leonid Ryvkin, Tilmann Wurzbacher and Marco Zambon: Conserved quantities on multisymplectic manifolds.

1610.05592

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

Madeleine Jotz Lean and Charlotte Kirchhoff-Lukat: Natural lifts of Dorfman brackets. 1610.05986

[math.DG]

Paula Balseiro: Hamiltonization of solids of revolution through reduction.

1610.06103

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

Jordi Gaset, Pedro D. Prieto-Martínez and Narciso Román-Roy: Variational principles and summetries on fibered multisymplectic manifolds.

1610.08689

[math-ph, math.MP, 70S10, 70S05, 70H50,49S05, 53D42, 55R10

Daniel M. Kane, Joseph Palmer and Álvaro Pelayo: Classifying toric and semitoric fans by lifting equations from  $SL_2(\mathbb{Z})$ .

1502.07698 (version 4)

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

Yohann Le Floch and Alvaro Pelayo: Spectral asymptotics of semiclassical unitary operators. 1506.02873 (version 3)

[math.SP, math.AP, math.SG]

J. F. Cariñena, F. Falceto and J. Grabowski: Solvability of a Lie algebra of vector fields implies their integrability by quadratures.

1606.02472 (version 2)

[math-ph, math.MP, 34A26, 37J15, 37J35, 70H06]

Hernán Cendra, Sergio Grillo and Maximiliano Palacios Amaya: Finite dimensional thermomechanical systems and second order constraints. 1609.05156 (version 2)

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

#### Network's collaborators preprints and papers

N. Aizawa, Z. Kuznetsova, H. Tanaka and F. Toppan:  $\mathbb{Z}_2 \times \mathbb{Z}_2$ -graded Lie Symmetries of the Lévy-Leblond Equations.

1609.08224 (version 2)

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

N. Aizawa, Z. Kuznetsova, H. Tanaka and F. Toppan: Generalized supersymmetry and Lévy-Leblond equation.

1609.08760

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

Alvaro del Pino and Francisco Presas: Flexibility for tangent and transverse immersions in Engel manifolds.

1609.09306

[math.SG, 58A30]

Pantelis A. Damianou, Charalampos A. Evripidou, Pavlos Kassotakis and Pol Vanhaecke: *Integrable reductions of the Bogoyavlenskij-Itoh Lotka-Volterra systems*.

1609.09507

[math-ph, math.MP, 37J35, 70H06]

Dirk Kreimer and Karen Yeats: Diffeomorphisms of quantum fields.

1610.01837

[math-ph, hep-th, math.MP, 81T15]

Janusz Grabowski, Michał Jóźwikowski and Mikołaj Rotkiewicz: Duality for graded manifolds.

1610.01888

[math.DG, math-ph, math.MP, 53C15, 57S25, 55R10, 58A50]

Dishant Pancholi, José Luis Pérez and Francisco Presas: A simple construction of positive loops of Legendrians.

1610.02383

[math.SG, 53D10, 57R17]

Matteo Petrera and René Zander: New classes of quadratic vector fields admitting integral-preserving Kahan-Hirota-Kimura discretizations.

1610.03664

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

José A. Carrasco, Federico Finkel, Artemio González-López and Miguel A. Rodríguez: Supersymmetric spin chains with non-monotonic dispersion relation: criticality and entanglement entropy.

1610.03989

[quant-ph, cond-mat.stat-mech, math-ph, math.MP, nlin.SI]

J. M. Pérez-Pardo: Dirac-like operators on the Hilbert space of differential forms on manifolds with boundaries.

1610.06792

[math-ph, math.MP]

Olivier Biquard, Óscar García-Prada and Ignasi Mundet i Riera: Parabolic Higgs bundles and representations of the fundamental group of a punctured surface into a real group.

1510.04207 (version 3)

[math.DG]

Jean-Emile Bourgine, Masayuki Fukuda, Yutaka Matsuo, Hong Zhang and Rui-Dong Zhu: Coherent states in quantum  $W_{1+\infty}$  algebra and qq-character for 5d Super Yanq-Mills.

1606.08020 (version 3)

[hep-th, math-ph, math.AG, math.MP, math.QA, math.RT]

#### Other Conferences

### Geometry and Lie Theory: Applications to Classical and Quantum Mechanics.

3–4 November 2016, Norwegian University of Science and Technology (NT, Norway).

http://www.math.ntnu.no/~mariusth/Eldar70

### 56th Meeting of the Texas Geometry and Topology Conference.

4–6 November 2016, Texas AM University, College Station, TX, United States.

http://www.math.tamu.edu/conferences/tgtc

### UFBS16 Universality in Few-Body Systems.

7 November–16 December 2016, Santa Barbara, CA. US.

http://www.aps.org/meetings/meeting.cfm?name=UFBS16

### Workshop on Conformal geometry and Spectral Theory.

11–13 November 2016, Berlin, Germany.

https://www.math.hu-berlin.de/~diffgeo/cgst/index.php

### Workshop III: Collective Variables in Quantum Mechanics.

14–18 November 2016, Institute for Pure and Applied Mathematics (IPAM), UCLA, United States.

http://www.ipam.ucla.edu/mpsws3

# Second Summer/Winter School on Dynamical Approaches in Spectral Geometry: "Dynamical Methods in Open Quantum Systems".

16–19 November 2016, University of Gttingen, Germany.

http://www.uni-math.gwdg.de/bahns/Spirit2016

# Fundamental Groups, Representations and Geometric Structures in 3-Manifold Topology.

21–23 November 2016, Hiroshima University, Japan.

http://home.hiroshima-u.ac.jp/ykoda/workshop 16.html

### Workshop: Topology and Geometry in a Discrete Setting.

28 November-2 December 2016, Providence, United States.

https://icerm.brown.edu/programs/sp-f16/w3/

#### Algebra and Geometry Meeting.

30 November-2 December 2016, Barcelona, Spain. https://sites.google.com/site/agmeeting2016/

#### Geometric Analysis and Control Theory.

8–12 December 2016, Sobolev Institute of Mathematics SB RAS–Novosibir, Russia.

http://gct.math.nsc.ru/?event=geometric-anal ysis-and-control-theory-rus&lang=en

### 11th Young Researchers workshop on Geometry, Mechanics and Control.

12–14 January 2017, Tenerife, Islas Canarias, Spain.

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

#### Iberoamerican conference on Geometry, Mechanics and Control.

 $16\hbox{--}20$  January 2017, Tenerife, Islas Canarias, Spain.

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

### ICCP10 The 10th International Conference on Computational Physics.

16-20 January 2017. Macao, China. http://www.iccpx.org/index.html

### Bangkok Workshop on Discrete Geometry and Statistics.

30 January-3 Februrart 2017. Bangkok. Thailand.

 $\label{lem:http://thaihep.phys.sc.chula.ac.th/BKK2017DSCR/} $$R/$$ 

#### SLE, GFF and LQG in NYC.

13-17 March, Columbia University, NYC. http://sites.google.com/site/slegfflqg17

### AdS3/CFT2-GGI2017 New Developments in AdS3/CFT2 Holography.

20 March-12 May, Florence, Italy.

http://ggi-www.fi.infn.it/index.php?page=work shops.inc&id=241

#### MFO Workshop Discrete Geometry.

9-15 April 2016, Oberwolfach, Germany. http://www.mfo.de/www/schedule/2017/all

### INI Workshop HTLW03 Physics and knot homologies.

10-13 April 2017. Cambridge, United Kingdom. http://www.newton.ac.uk/event/htlw03

### Complex Geometry, Dynamical Systems and Foliation Theory.

21–16 May 2017, Singapore.

http://www2.ims.nus.edu.sg/Programs/017geo/index.php

#### Methods in Geometry and Physics.

5-7 May 2017, Allerton, IL, United States. http://schapos.people.uic.edu/Steve.html

### SIAM conference on applications of dynamical systems.

21-25 May, 2017. Snowbird, Utah, US. http://www.siam.org/meetings/calendar.php

### Mathematical aspects of the physics with non-self-adjoint operators.

5–9 June, 2017. Marseille, France.

http://gemma.ujf.cas.cz/~david/Conferences.htm

## FDIS2017 Finite Dimensional Integrable Systems in Geometry and Mathematical Physics.

3–7 July 2017, Barcelona, Spain.

http://www.crm.cat/en/Activities/Curs\_2016-2017/Pages/Finite-Dimensional-Integrable-Systems-in-Geometry-and-Mathematical-Physics.aspx

### 11th International Conference on Clifford Algebras and Their Applications in Mathematical Physics.

7-11 August 2017. Ghent, Belgium.

http://www.icca11.ugent.be/

Mathematical Questions and Challenges in Quantum Electrodynamics and its Applications.

10-16 September 2017, Oberwolfach, Germany. http://www.mfo.de/www/schedule/2017/all

Classical and Quantum Mechanical Models of Many-Particle Systems.

3–9 December 2017, Oberwolfach, Germany.

http://www.mfo.de/www/schedule/2017/all

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