

Geometry,
Mechanics and
Control Network
Infosheet

April 2013

Editors: Javier de Lucas and Silvia Vilariño

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### GMC Network Infosheet

April 2013

### Network's activities

7th International Summer School on Geometry, Mechanics and Control (ICMAT School).

La Cristalera, Miraflores de la Sierra, Madrid, Spain. July 1-5, 2013.

### Speakers:

- M. J. Gotay (Pacific Institute for the Mathematical Sciences, Canada): *Momentum Maps, Constraints and Classical Field Theories*.
- P. S. Krishnaprasad (University of Maryland, USA): Geometry of Collectives: Control, Dynamics and Reconstruction.
- D. Peralta Salas (Instituto de Ciencias Matemáticas CSIC-UAM-UC3M-UCM, Spain): Topological structures in steady fluid flows.

#### Deadline:

- Application for scholarship no later than April 30, 2013.
- Abstract submission for short talks/posters no later than April 30, 2013.
- Registration no later than May 15, 2013.
- Accommodation no later than May 15, 2013.

More information.

http://gmcnetwork.org/?q=activity-detail1/867

8th International Young Researchers Workshop on Geometry, Mechanics and Control.

Technical University of Catalonia, Barcelona, Spain. December 11-13, 2013.

http://gmcnetwork.org/?q=activity-detail1/1027.

#### deLeónfest 2013.

ICMAT, Madrid, Spain. December 16-19, 2013. http://www.icmat.es/deLeonfest/.

### Job offers, fellowships and awards

### Undergraduate research offers

#### CAll JAE-INTRO CP 2013.

CSIC.

Madrid, Spain.

Call BOE 04-08-2013.

Closing date: April 23, 2013.

https://sede.csic.gob.es/jae-intro-cp-2013

#### 10 JAE-INTRO CP 2013 at ICMAT.

ICMAT, CSIC.

Madrid, Spain.

Closing date: April 23, 2013.

http://www.icmat.es/resources/employment/JAE-

IntroCP

### Ph.D. offers

#### 2013 CRM Ph. D. Student Call.

Centre de Recerca Matemàtica.

Barcelona, Spain.

The Centre de Recerca Matemàtica (CRM, http://www.crm.cat) is seeking to identify PhD students or postdoctoral researchers willing to join a research group of CRM (see list below). We look for candidates to be included in research proposals that CRM has been invited to submit to a number of external funding agencies.

Closing date: April 26, 2013.

http://www.crm.cat/en/Research/Pages/2013-CR M-Doctoral-and-Postdoctoral-Prospective-Ca ll.aspx

#### Ph.D. Studentship in Mathematics.

Department of Mathematical Sciences. Brunel University, Uxbridge, London, UK.

Closing date: April 30, 2013.

http://www.jobs.ac.uk/job/AGE038/

#### PhD positions in Mathematics.

KTH Royal Institute of Technology.

Stockholm, Sweden.

Closing date: May 2, 2013.

http://www.euro-math-soc.eu/node/3571

#### UAM FPI Programme: call 2013.

Universidad Autónoma de Madrid.

Madrid, Spain.

30 scholarships for the training of research staff - FPI grants.

Closing date: May 3, 2013.

http://www.icmat.es/resources/employment/FPI-UAM/2013

### PhD Research Studentship in Mathematical Sciences.

School Of Computing And Mathematics.

Plymouth University, England, UK. Closing date: May 3, 2013 (12 noon).

http://www.jobs.ac.uk/job/AGI864/

### PhD position in Theoretical Physics.

Department of Physics and Astronomy.

Uppsala University, Sweden.

Closing date: May 31, 2013. http://www.uu.se/jobb/teacher/annonsvisning?t

arContentId=238302\$&\$languageId=1

# 170 grants for embarking on post-graduate study programmes at the UAM: call 2013.

Universidad Autónoma de Madrid.

Madrid, Spain.

A call has been published to support university students embarking in masters (Máster Universitario) or pre doctoral (Periodo Formativo de Programa de Doctorado) studies at the UAM.

Closing date: July 1-31, 2013.

http://www.icmat.es/job-opportunities/degree

/uam/2013

### Ph.D. Fellowships in Nonlinear Dynamical Systems.

Institute of Mechanical Systems.

ETH Zürich.

 $\verb|http://georgehaller.com/Nonlinear_Dynamics_a|$ 

t\_ETH.pdf

#### Student and Research Fellowships.

The International Mathematical Union, the Einstein Foundation Berlin and the Berlin Mathematical School.

Berlin, Germany.

The International Mathematical Union, the Einstein Foundation Berlin and the Berlin Mathematical School invite applications from Ph.D. students and researchers from developing countries for research visits in the active Berlin mathematics research environment. Research visits can last between three to nine months. The program has been established on the occasion of the establishment of the IMU secretariat in Berlin by the Einstein Foundation Berlin (ESB).

Closing date: At least six months before the desired starting date.

http://www.math-berlin.de/efp/imu-esb

## PhD Studentship: Rocket trajectory prediction problems.

Faculty of Engineering and the Environment. University of Southampton, UK.

Closing date: Applications will be accepted at any time until the position is filled.

http://www.jobs.ac.uk/job/AGE754/

## Research Opportunities for Students in Applied Mathematics.

Basque Center for Applied Mathematics (BCAM).

Bilbao, Basque Country, Spain.

BCAM brings the opportunity for excellent international students to join a world-class interdisciplinary research center in Bilbao, Spain.

The applications for the internship positions may take a form of:

- Summer or one-semester stay,
- Master thesis
- Industrial project
- Part of Ph.D. thesis.

#### Closing date: any time.

http://www.bcamath.org/en/research/internships

# Ph.D. Research Project: Inverse Problems (PIM).

Department of Applied Mathematics.

University of Leeds, UK.

Closing date: applications accepted all year round.

http://www.findaphd.com/search/ProjectDetails.aspx?PJID=19061&LID=754

# Ph.D. Research Project: Classical and Quantum Integrability.

Department of Applied Mathematics.

University of Leeds, UK.

Closing date: applications accepted all year round.

http://www.findaphd.com/search/ProjectDetails .aspx?PJID=19048&LID=754

# Ph.D. Research Project: Nonlinear Integrable PDEs and Non-commutative Geometry (Integrable Systems).

Department of Applied Mathematics.

University of Leeds, UK.

Closing date: applications accepted all year round.

http://www.findaphd.com/search/ProjectDetails .aspx?PJID=19046&LID=754

# Ph.D. Research Project: Quantum Discrete Systems and Integrability.

Department of Applied Mathematics.

University of Leeds, UK.

Closing date: applications accepted all year round.

http://www.findaphd.com/search/ProjectDetails .aspx?PJID=19072&LID=754

# Ph.D. Research Project: Sine-Gordon Solitons vs. Calogero-Moser Particles (Integrable Systems).

Department of Applied Mathematics.

University of Leeds, UK.

Closing date: applications accepted all year round.

http://www.findaphd.com/search/ProjectDetails.aspx?PJID=19075&LID=754

# Ph.D. Research Project: Integrable Difference Equations.

Department of Applied Mathematics.

University of Leeds, UK.

Closing date: applications accepted all year round.

http://www.findaphd.com/search/ProjectDetails .aspx?PJID=19071&LID=754

#### Postdoctoral fellowships

### 2013 CRM Postdoctoral Call.

Centre de Recerca Matemàtica.

Barcelona, Spain.

The Centre de Recerca Matemàtica (CRM, http://www.crm.cat) is seeking to identify PhD students or postdoctoral researchers willing to join a research group of CRM (see list below). We look for candidates to be included in research

proposals that CRM has been invited to submit to a number of external funding agencies.

Closing date: April 26, 2013.

 $\label{lem:http://www.crm.cat/en/Research/Pages/2013-CR} $$ M-Doctoral-and-Postdoctoral-Prospective-Ca $$ 11.aspx $$$ 

# Mary Ewart Junior Research Fellowship 2013-2016 in Mathematics and/or Computing.

Somerville College.

University of Oxford, UK.

Closing date: April 29, 2013 (12 noon).

http://www.jobs.ac.uk/job/AGG324/

#### Postdoctoral Position in Mathematics.

Universita' di Roma "La Sapienza".

Roma, Italy.

Closing date: May 3, 2013.

http://www.euro-math-soc.eu/jobs.html

### Research Associate in Symplectic and Contact Topology.

UCL Department of Mathematics. University College London, UK.

Closing date: May 26, 2013 (11:59 pm).

http://www.jobs.ac.uk/job/AGJ088/

### Postdoctoral Research Positions. Inria, Campaign 2013.

Inria.

France.

Closing date: June 14, 2013.

http://www.inria.fr/en/institute/recruitment/offers/post-doctoral-research-fellowships/campaign-2013

### Open Positions for a Marie-Curie postdoc.

MTU Aero Engines.

Munics, Germany.

The MTU Aero Engines (Munich, Germany, www.mtu.de) has an opening for one 12-18month postdoc position (experienced researcher 4-10 years experience) under an EU 7 FP People Program ï¿Industry-Academia Partnerships and Pathwaysï¿ (Call: FP7-PEOPLE-2012-IAPP) on "Exact and Adaptive Modeling and Simulation of the Air Passage of Aircraft Engines" (EXAMPLE) in cooperation with the Institute for Applied Geometry of the academic partner Johannes Kepler University (JKU).

Closing date: July 1, 2013.

http://www.mtu.de/de/

### Weierstrass Postdoctoral Fellowship Program.

Weierstrass Institute for Applied Analysis and Stochastics (WIAS).

Forschungsverbund, Berlin, Germany.

WIAS offers postgraduate fellowships for 2012/2013. Their duration is six or twelve months. These fellowships are designed to enable highly-qualified young scientists to participate in

the research into the mathematical problems in the above fields, thus furthering their education and training.

Closing date: August 31, 2013 and February 28, 2014

http://www.wias-berlin.de/jobs/fellowship.j
sp?lang=1

### Grants for short postdoctoral research visits at IMUS.

IMUS.

Sevilla, Spain.

The goal of these grants is the establishment or development of research collaborations between young doctors from outside the University of Seville and University researchers in the field of Mathematics or its applications to other disciplines. The stays will have a consecutive duration of 2 months, although longer periods could be considered on the basis of the proposed work plan. The stays will take place between September  $1^{st}$ , 2013 and July  $31^{st}$ , 2014.

Closing date: December 10,2013.

http://www.imus.us.es/images/stories/noticias/2013/estancias-IMUS-2013-en.pdf

### Postdoctoral Position – Control Theory, Networks and Neuroscience.

Engineering Systems and Design (ESD).

Singapore University of Technology and Design. Closing date: Open until filled.

http://engineering.academickeys.com/seeker\_job\_display.php?job[IDX]=43401

## Postdoctoral Positions in Analysis in Erlangen.

Department of Mathematics.

University of Erlangen, Germany.

The positions will be devoted to research in Analysis, more specifically in Calculus of Variations and PDE, under different points of view. Moreover, there is a broad flexibility regarding the starting date of the positions.

The candidates must send an application by email, containing the CV with a list of publications and of talks given. The starting date for the positions can be from Jan. 1st, 2013, but it is easily possible to discuss another date, if needed. Any request or information, as well as the applications, has to be sent by email to pratelli@math.fau.de.

Closing date: Any time.

http://www.analysis.math.fau.de/staff-members/pratelli-aldo/prof-dr-aldo-pratelli/positions/post-doc-and-phd-positions.html

#### Postdoctoral Position.

Department of Mathematics.

Baylor University, Texas, USA.

Closing date: Until position is filled.

http://www.mathjobs.org/jobs/jobs/3886

## Riemann Fellowships to Mathematicians and Theoretical Physicists.

Riemann Center for Geometry and Physics. Leibniz Universität Hannover, Germany.

Closing date: any time.

http://riemanncenter.de/fellowships.html

### Offers for visiting and senior researchers

#### Lecturer in Maths.

Askham Bryan College.

York, North Yorkshire, England, UK.

Closing date: April 26, 2013.

http://www.jobs.ac.uk/job/AGI980/

### Senior Lecturer in Primary Mathematics.

School of Education.

Bath Spa University, Somerset, England, UK. Closing date: April 29, 2013 (12 noon GMT).

http://www.jobs.ac.uk/job/AGI795/

### University Lecturer in Theoretical Physics.

University of Cambridge.

Cambridge, England, UK.

Closing date: April 30, 2013.

http://www.jobs.ac.uk/job/AGG583/

### Associate Professor, Mathematics/Science Education.

Institute of Technology, University of Ontario.

Oshawa, ON, Canada. Closing date: May 1, 2013.

http://education.academickeys.com/seeker\_job

\_display.php?job[IDX]=43395

### Research Associate/Assistant in Fluid Mechanics.

Department of Mechanical Engineering.

University of Sheffield, UK. Closing date: May 2, 2013.

http://www.jobs.ac.uk/job/AGH105/

### Lecturer in Applied Mathematics.

School of Mathematics.

University of Bristol, UK.

Closing date: May 5, 2013.

http://www.jobs.ac.uk/job/AGF189/

#### Lecturer Fixed Term in Mathematics.

School of Mathematics, Statistics & Applied

Mathematics.

National University of Ireland, Galway.

Closing date: May 9, 2013 (midnight (GMT)).

http://www.jobs.ac.uk/job/AGI819/

## Lecturer in Applied Mathematics and Theoretical Physics.

School of Mathematics and Physics, Centre for Theoretical Atomic, Molecular and Optical Physics.

Queen's University Belfast, Northern Ireland, UK.

Closing date: May 13, 2013.

http://www.jobs.ac.uk/job/AGI868/

## Marie Curie Fellowship in Theoretical Physics Group.

 ${\bf Mathematics\ Department.}$ 

King's College London, UK.

Closing date: May 14, 2013.

http://www.jobs.ac.uk/job/AGI682/

### W2-professorship (Associate Professor) on Inverse Problems.

University of Wuerzburg.

Germany.

Closing date: June 7, 2013.

http://www.euro-math-soc.eu/node/3570

#### Assistant Professor in Mathematics.

Department of Mathematics.

Pontificia Universidad Catolica de Chile, Chile.

Closing date: June 30, 2013.

http://www.all-acad.com/files/52045.pdf

### Open position-Director of the Weierstrass Institute and Professorship (W3-S) in Applied Mathematics.

(Succession of Professor Dr. Jürgen Sprekels).

Weierstrass Institute for Applied Analysis and

Stochastics, Berlin.

Closing date: April 1, 2014.

http://www.wias-berlin.de/jobs/Ausschr-NFSpre

kels-eng111206.pdf

# Mathematics Department Adjunct Faculty.

Mathematics Department.

Salt Lake Community College, Salt Lake County, UT, USA.

Closing date: Open until filled.

http://sciences.academickeys.com/seeker\_job\_d isplay.php?job[IDX]=44867

### Assistant Professor in Applied Mathematics.

Department of Mathematical and Statistical Sciences.

University of Alberta, Canada.

#### Closing date: Open until filled.

http://www.mathstats.ualberta.ca/~/media/University%20of%20Alberta/Faculties/Science/Departments/Math%20and%20Stat%20Sciences/Documents/GradStudentResources/Employment\_Posting\_3.pdf

#### Assistant Professor in Math Physics.

Department of Mathematical and Statistical Sciences.

University of Alberta, Canada.

#### Closing date: Open until filled.

http://www.mathstats.ualberta.ca/~/media/University%20of%20Alberta/Faculties/Science/Departments/Math%20and%20Stat%20Sciences/Documents/GradStudentResources/Employment\_Posting\_2.pdf

### Assistant Professor of Applied Mathematics.

College of Education & Basic Sciences.

Ajman University of Science and Technology, United Arab Emirate.

Position Start Date: August 15, 2013.

Closing date: Open Until Filled.

http://sciences.academickeys.com/seeker\_job\_d isplay.php?dothis=display&job[IDX]=43762-SC 130322b-8e&oid=798206

### Call for Visiting Professors at CIRM.

Fondazione Bruno Kessler.

Trento University, Trento, Italy.

CIRM Visiting Scholars will perform mathematical research in cooperation with scientists and researchers of Trento University or, more generally, of the Trento area, holding some research seminars. CIRM Visiting Professors will hold short Ph.D. courses, or 'Summer Courses', or series of seminars. It is foreseen that the selection process for Visiting Professors-Scholars take place through either individual application, or Invitation by a professor of Trento University or by a member of the Advisory Board.

Closing date: Applications may be sent at any time

http://cirm.fbk.eu/en/Visiting+Professors

## Research in Pairs Program: Centro Internazionale per la Ricerca Matematica.

Fondazione Bruno Kessler.

Trento University, Trento, Italy.

This type of program is similar to the one of the Mathematisches Forschungsinstitut Oberwolfach, and foresees the presence of two or three partners from Universities located in different towns, who intend to work on a definite research project and for a well specified period of time (ranging from one to six weeks). Applicant partners must submit a scientific project in the field of mathematics, with a detailed research program, resulting in one or more scientific publications on journals of excellent mathematical level; the support of the CIRM will then be acknowledged in the resulting publications. Participants in the RIP Program will also give occasional research seminar talks at the CIRM or at the University of Trento, but will enjoy freedom in the pursuit of their scientific goals. Applications where one or more of the partners are Italians will of course be welcome.

Closing date: Applications may be sent at any time.

http://cirm.fbk.eu/en/node/122

#### Visiting the CRM.

Centre de Recerca Matemàtica.

Catalonia, Spain.

The CRM offers the possibility of hosting researchers wishing to stay at the Centre for a period normally ranging from one to six months, preferably 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 office space and working facilities at the Centre, as well as house-finding assistance if necessary. Support for housing expenses can be requested, although the CRM can only assign an overall small amount of support to visits outside its Research Programmes. Visits should be carried out during the academic year (from September to July). A resolution will be given by the CRM no later than three months after submission of the application.

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

http://www.crm.cat/en/VisitingTheCRM/Pages/GuidelinesvisitingCRM.aspx

#### Research in Pairs in Barcelona.

Centre de Recerca Matemàtica.

Catalonia, Spain.

Application are welcome for stays at the CRM aiming to carry out collaborative research work of a small team of people, consisting of: a principal investigator, staying at the CRM for a quarter or a semester. One or two collaborators, staying at the CRM for at least one month. Researchers from Catalan universities can apply as principal investigators if they are free from teaching duties during the period of their stay at the CRM. Office space and working facilities will be provided by the CRM, as well as house-finding assistance if necessary. Support for housing expenses can be requested, and priority will be given to applications with a self-funded principal investigator. Visits should be carried out during the academic year (from September to July).

Closing date: Applications can be submitted at any time generally between 6 and 12 months be-

#### fore the start of the desired stay.

http://www.crm.cat/en/VisitingTheCRM/Pages/C OLLABORATION-RESEARCH-STAYS.aspx

#### Visiting the ICMAT.

ICMAT.

Madrid, Spain.

The ICMAT offers the possibility of hosting researchers wishing to stay at the institute for a period normally ranging from one to twelve months, preferably having a research plan and a scientific connection with ICMAT researchers. Visitors will be provided with office space and working facilities at the institute, as well as house-finding assistance if necessary. No financial support will be provided for these visits. Applications can be submitted at any time by sending the required information to the ICMAT at gestion@icmat.es. Closing date: 2 months before the start of the desired stay.

http://www.icmat.es/people/visitFac

### **Awards**

### "Ciencia en Acción" Competition.

Closing date: May 15, 2013.

http://www.cienciaenaccion.org/

# BBVA Foundation "Frontiers of Knowledge Awards" 2013.

Closing date: July 1, 2013.

http://www.fbbva.es/TLFU/tlfu/ing/microsites/premios/fronteras/index.jsp

### EMS Monograph Award.

On the occasion of its 10th anniversary the EMS Publishing House is pleased to announce the EMS Monograph Award. The prize is endowed with

10.000 Euro, and the winning monograph is published by the EMS Publishing House in the series EMS Tracts in Mathematics.

Closing date: June 30, 2013.

http://www.ems-ph.org/EMS\_Monograph\_Award.php

#### ICIAM Prizes for 2015.

The ICIAM Prize Committee for 2015 now calls for nominations for the five ICIAM Prizes to be awarded at the 2015 Congress.

Closing date: October 31, 2013.

http://www.iciam.org/Prizes/Prizes-CallforNominations2015.pdf

### Financial support for research projects and conferences

### Marie Curie Career Integration Grants (CIG).

Deadline: September 18, 2013 (17:00 Brussels local time).

http://ec.europa.eu/research/mariecurieactions/apply-now/open-calls/index\_en.htm

# 2015 CIMPA research schools call for projects.

The call of proposal for 2015 will begin in March 2013. If you want to know how to propose a research school project, go to the following web page: http://www.cimpa-icpam.org/spip.p

hp?rubrique35&lang=enandtheRoadmap Deadline: October 1, 2013.

http://www.cimpa-icpam.org/spip.php?article

#### Call for 2015-2016 Research Programmes.

The CRM invites proposals for Research Programmes during the academic year 2015-2016 in any branch of mathematics and its applications. CRM Research Programmes consist of periods ranging between two to five months of intensive research in a given area of mathematics and its applications. Researchers from different institutions are brought together to work on open prob-

lems and to analyse the state and perspectives of their area.

Deadline: November 29, 2013 (preliminary sub-

mission by october 25, 2013.).

http://www.crm.cat/en/Pages/DetallCrida.asp x?ItemID=7

### Interesting news and publications

### Journal of Geometric Mechanics (JGM).

Volume 5, Number 1, March 2013.

http://www.aimsciences.org/journals/contents Listnew.jsp?pubID=591

### IMU-Net 58: International Mathematical Union Newsletter.

March 2013

http://www.mathunion.org/imu-net/archive/2013/imu-net-058/

#### ICMAT Newsletter.

First number

http://www.icmat.es/outreach/newsletter/num1

# 2013 has been declared a special year for the Mathematics of Planet Earth.

Related activities are listed at: http://mpe2013.org/

### Info website for Ph.D Students in Mathematics.

i-Math Consolider project (only in Spanish) http://www.doctoradomath.es/

#### Online Encyclopedia of Mathematics.

http://www.encyclopediaofmath.org/index.php/Main\_Page

### The IRSES Network 'GEOMECH'.

GEOMECH is an IRSES network sponsored within the 7th EU Framework Program and is coordinated by Ghent University.

http://www.geomechnetwork.ugent.be/

#### Mathematics in Europe.

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

### Matemáticas y sus fronteras.

Those interested in publishing something, contact with Manuel de León mdeleon.dos@gmail.com . http://weblogs.madrimasd.org/matematicas/

# Free access to Ph.D. dissertations all around the world.

http://www.ndltd.org/find

#### Professional network for scientists.

http://www.researchgate.net/

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

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

### Courses online of Mathematics, Physics,....

Courses from 62 universities.

https://www.coursera.org/courses?orderby=upcoming

### Network's members preprints and papers

I. Androulidakis, M. Zambón: Holonomy transformations for singular foliations. arXiv:1205.6008v2 [math.DG]

A. Pelayo, S. Vu Ngoc: The Hofer question on intermediate symplectic capacities. arXiv:1210.1537v3 [math.SG, math.DS]

E. Miranda and R. Solha: On a Poincare lemma for foliations.

arXiv:1301.5819v2[math.SG]

J. F. Cariñena, P. Guha, J. de Lucas: A Quasi-Lie Schemes Approach to Second-Order Gambier Equations.

arXiv:1303.3434v2 [math-ph, math.CA, math.DG, math.MP, nlin.SI]  $\,$ 

J. F. Cariñena, F. Falceto, M. F. Rañada: Canonoid transformations and master symmetries.

 $\begin{array}{lll} arXiv:1303.6225 & [math-ph, & hep-th, & math.DS, \\ math.MP] \end{array}$ 

A. Enciso, D. Peralta-Salas: Gradient dynamical systems on open surfaces and critical points of. arXiv:1304.1652 [math.DG, math.DS]

Yuri N. Fedorov, Luis C. García-Naranjo and J. C. Marrero: *Unimodularity and preservation of volumes in nonholonomic mechanics*. arXiv:1304.1788 [math-ph, math.MP]

Y. Fregier, C. L. Rogers, M. Zambón: *Homotopy moment maps*.

 $\begin{array}{ll} arXiv:1304.2051 & [math.DG, \ math-ph, \ math.AT, \\ math.MP, \ math.SG] \end{array}$ 

M. Crampin and T. Mestdag: A class of Finsler surfaces whose geodesics are circles. arXiv:1304.2965[math.DG]

M. de León, S. Vilariño: Hamilton-Jacobi theory in k-cosymplectic field theories. arXiv:1304.3360[math-ph, math.MP]

P. Antunes and J. M. Nunes da Costa: *Hyperstructures on Lie algebroids*. arXiv:1304.4102[math.SG, math.DG]

A. Ballesteros, A. Enciso, F. J. Herranz, Orlando: Superintegrable quantum oscillator and Kepler-Coulomb systems on curved.
arXiv:1304.4544[quant-ph, math-ph, math.MP, nlin.SI]

#### Network's collaborators preprints and papers

J. E. Marsden (California Institute of Technology), Hong Wang: Regular reduction of controlled Hamiltonian system with symplectic. arXiv:1202.3564 [math.SG, math.DS]

G. Alvarez, L. Martinez Alonso, E. Medina: Superpotentials, quantum parameter space and phase transitions in N=1. arXiv:1301.5982v2 [math-ph, hep-th, math.MP]

J.Wei, A.J. van der Schaft: Load balancing of dynamical distribution networks with flow constraints.

arXiv:1303.4554[math.OC]

M. Caponigro, R. Ghezzi, B. Piccoli, E. Trelat: Regularization of chattering phenomena via bounded variation control. arXiv:1303.5796 [math.OC]

I. Bucataru, Z. Muzsnay: Metrizable isotropic second-order differential equations and Hilberts. arXiv:1303.5832 [math.DG]

R. Ghezzi, B. Piccoli: Optimal control of a bioreactor for biofuel production. arXiv:1303.6688 [math.OC] B. Hamzi, J. S.W. Lamb, D. Lewis: A characterization of normal forms for control systems. arXiv:1303.7245 [math.OC, math.DS]

T. Alamo, R. Tempo, A. Luque, D.R. Ramirez: The Sample Complexity of Randomized Methods for Analysis and Design of. arXiv:1304.0678 [cs.SY, math.OC]

D. Li-Bland, P. Severa: Symplectic and Poisson geometry of the moduli spaces of flat connections. arXiv:1304.0737 [math.DG, math-ph, math.MP, math.SG]

P. Birtea, D. Comuanescu, Cualin-Adrian Popa: Averaging on Manifolds by Embedding Algorithm. arXiv:1304.0592 [math.OC]

L. Herrera, W. Barreto: Newtonian polytropes for anisotropic matter: General framework and. arXiv:1304.2824 [astro-ph.IM, gr-qc, math-ph, math.MP]

Fangxu Jing, E. Kanso: Stability of Periodic Locomotion in Potential Flow. arXiv:1304.5046 [physics.flu-dyn, math-ph, math.MP]

### **Other Conferences**

# Intensive Program: Control of Complex Quantum Systems.

January 7-March 28, 2013. Santa Barbara, USA. http://www.kitp.ucsb.edu/activities/dbdetails?acro=qcontrol13

AIM Workshop: Geometric perspectives in mathematical quantum field theory.

April 8-12, 2013. Palo Alto, California, USA. http://www.aimath.org/ARCC/workshops/geometricqft.html

# EUROMATH 2013: European Student Conference in Mathematics.

April 10-14, 2013. Gothenburg, Sweden. http://www.euromath.org/index.php?id=86

#### Geomathematics 2013.

April 15-17, 2013. Palatinate, Germany. http://www.geomathematics2013.de

Conference New Trends in Regularization Theory and Methods for Geomathematical Problems. May 6-10, 2013.

http://www.crm.cat/en/Activities/Pages/ActivityDescriptions/Conference-New-Trends-in-Regularization-theory-and-methods-for-Geomathematical-problems.aspx

## NCPAM National Conference on Pure and Applied Mathematics.

May 9-10, 2013. Guwahati, Assam, India. http://www.ncpam.ac.in

#### IV MACI 2013.

May 15-17, 2013. Buenos Aires, Argentina. http://asamaci.org.ar/eventos/iv-maci-2013-1-1

# SIAM Conference on Applications of Dynamical Systems.

May 19-23, 2013. Snowbird, Utah, USA. http://www.siam.org/meetings/ds13/

### 10TH HSTAM International congress on mechanics.

May 25-27, 2013. Crete, Greece. http://www.10hstam.tuc.gr/

## Conference on Nonlinear Mathematical Physics: Twenty Years of JNMP.

June 4-14, 2013. Nordfjordeid, Norway. http://staff.www.ltu.se/~johfab/jnmp/index.html

# XV-th International Conference on Geometry, Integrability and Quantization.

June 7-12, 2013. Sts. Constantine and Elena resort, Bulgaria.

http://www.bio21.bas.bg/conference/

#### **CSASC 2013.**

June 9-13, 2013. Koper, Slovenia. http://conferences2.imfm.si/conferenceDisplay.py?confId=14

# Pde's, Dispersion, Scattering theory and Control theory.

June 10-14, 2013. Monastir, Tunisia. http://www.euro-math-soc.eu/node/2973

# GDIS 2013 Fourth International Conference Geometry, Dynamics, Integrable Systems.

June 10-14, 2013. Izhevsk, Rusia. http://www.mi.sanu.ac.rs/~gdis2013

#### American Control Conference.

June 17-19, 2013. Washington, DC, USA.

http://a2c2.org/conferences/acc2013/

### Variational problems and Geometric PDE's.

June 17-21, 2013. Granada, Spain. http://gigda.ugr.es/granada2013/Welcome.html

# SUMMER@ICERM: 2013 Undergraduate Summer Research Program "Geometry and Dynamics".

June 17-August 9, 2013. Rhode Island, USA. https://icerm.brown.edu/summerug\_2013

### Physics and Mathematics of Nonlinear Phenomena 2013.

June 22-29, 2013. Gallipoli, Italy. http://pmnp2013.dmf.unisalento.it/

### ERC Workshop "Variational Views in Mechanics and Materials".

June 24-26, 2013. Pavia, Italy. http://www.imati.cnr.it/ulisse/v2m2.html

## International Conference on Geometry: Theory and Applications.

June 24-28, 2013. Ljubljana, Slovenia. http://cgta2013.imfm.si

# Encuentro Geometría Diferencial y sus Aplicaciones (homenage a Eugenio Merino Gayoso).

June 27-28, 2013. Ferrol, Spain. http://geometria.ferrol2013.udc.es

# Integrable Systems in the XXI century: symplectic, algebraic and spectral theory.

July 1- December 31, 2013.

http://integrablesystems.epfl.ch/

## Summer School: Integrable Systems and Semiclassical Analysis.

July 1-5, 2013. Centre Interfacultaire Bernoulli, EPFL, Lausanne, Switherland.

http://integrablesystems.epfl.ch/school.php

## The 2013 International Conference of Applied and Engineering Mathematics.

July 3-5, 2013. London, United Kingdom. http://www.iaeng.org/WCE2013/ICAEM2013.html

# SIAM Conference on Control and Its Applications.

July 8-10, 2013. San Diego, USA. http://www.siam.org/meetings/ct13/

## TNADE2013 Topics in Numerical Analysis for Differential Equations.

July 8-12, 2013. Madrid, Spain.

http://www.icmat.es/congresos/tnade2013/TNADE2013.html

## The sixth International Congress of Chinese Mathematicians.

July 14-19, 2013. Taipei, Taiwan.

http://iccm.tims.ntu.edu.tw/

# JISD2013- Workshop on Interactions between dynamical systems and partial differential equations.

July 15-19, 2013. Barcelona, Spain.

http://www.ma1.upc.edu/recerca/seminaris-recerca/jisd2013/jisd2013

#### XVI Summer Diffeity School.

July 15-27, 2013. Conference Center "Pomorski Park Naukono-Technologiczny" of Gynia, Poland.

https://sites.google.com/site/levicivitainstitute/xvi-summer-diffiety-school

#### European Control Conference.

July 17-19, 2013. Zurich, Switzerland. http://www.ecc13.ch/

### VII International Meeting on Lorentzian Geometry.

July 22-26, 2013. Sao Paulo, Brazil. http://www.ime.usp.br/~gelosp2013/

#### Conference in honor of Alan Weinstein.

July 22-26, 2013. EpFL, Lousanne, Switzerland. http://integrablesystems.epfl.ch/w-conference.php

### 1st Mathematical Congress of the Americas.

August 5-9, 2013. Guanajuato, Mexico. http://www.mca2013.org/

### 18th International Summer School on Global Analysis and its Applications.

August 12-17, 2013. Levoca, Slovakia..

http://www.lepageri.eu/ga2013/

### Mathematical General Relativity.

August 19-December 20, 2013. Berkeley, California, USA.

http://www.msri.org/web/msri/scientific/programs/show/-/event/Pm8946

## Optimal Transport: Geometry and Dynamics.

August 19-December 20, 2013. Berkeley, CA, USA.

http://www.msri.org/web/msri/scientific/programs/show/-/event/Pm8952

### GAP XI-Conference and Summer School: Higher Geometry and Quantum Field Theory. Séminaire itinérant "Géométrie et Physique".

August 19-23,2013. Pittsburgh, USA. http://www.personal.psu.edu/yuv1/blogs/gap/

# DGA 2013. Differential Geometry and its Applications.

August 19-23, 2013. Brno. Czech Republic. https://inserv.math.muni.cz/dga2013/

# Connections for Women on Optimal Transport: Geometry and Dynamics.

August 22-23, 2013. Berkeley, California, USA. http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9225

## Introductory Workshop on Optimal Transport: Geometry and Dynamics.

August 26-30, 2013. Berkeley, California, USA. http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9226

# International Conference on Mathematical Modeling in Physical Sciences, IC-MSQUARE.

September 1-5, 2013. Prague, Czech Republic. http://www.icmsquare.net/

# XXII International Fall Workshop on Geometry and Physics.

September 2-5, 2013. Évora, Portugal.

Deadline for abstract submission: May 31. Deadline for reduced registration fee: June 30. Registration deadline: July 31.

http://www.ifwgp2013.uevora.pt/

#### NOLCOS 2013.

September 4-6, 2013. Toulouse, France. http://conf.laas.fr/NOLCOS2013/

## Advanced course on Geometry and Dynamics of Integrable Systems.

September 9-14, 2013. Barcelona, Spain. Deadline for grant applications: June 24, 2013.

Deadline for grant applications: June 24, 2013. Deadline for registration: July 14, 2013.

http://www.crm.cat/en/Activities/Pages/ActivityFoldersAndPages/Curs\$%\$202013-2014/acintegrablesystems/acintegrablesystems.aspx

# Conference on integrability, topological obstructions to integrability and interplay with geometry.

September 16-20, 2013. Barcelona, Spain. Deadline for grant applications: June 24, 2013. Deadline for registration: July 14, 2013.

http://www.crm.cat/en/Activities/Pages/ActivityFoldersAndPages/Curs\$%\$202013-2014/Cintegrability/Cintegrability.aspx

### Young Researchers Conference Royal Spanish Mathematical Society.

September 16-20, 2013. Sevilla, Spain. http://www.imus.us.es/2cji/?lang=eng

International conference "Kolmogorov readings - VI. General control problems and their applications" (GCP - 2013).

October 7-11, 2013. Tambov, Rusia. http://www.tambovopu2013.narod.ru

# Fluid Mechanics, Hamiltonian Dynamics, and Numerical Aspects of Optimal Transportation.

October 14-18, 2013. Berkeley, California, USA. http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9227

#### Qdays in Barcelona.

October 16-18, 2013. Barcelona, Spain. http://www.crm.cat/en/Activities/Pages/ActivityFoldersAndPages/Curs\$%\$202013-2014/Qdays/QdaysinBarcelona.aspx

### ICMAT Laboratory "Viktor Ginzburg".

November 11-15, 2013. Madrid, Spain.. http://www.icmat.es/severo-ochoa/Activities/I CMat\_Laboratories/Ginzburg/plannedactivities

#### MCT Mathematical Control.

December 2-6, 2013. Trieste, Italy. http://mct.lsis.org

Introductory Workshop: tropical geometry in its complex and symplectic aspects. January 20-24, 2014.

http://cib.epfl.ch/PublicEvent.php?event=1004

Symplectic aspects of tropical geometry. June 16-20, 2014.

http://cib.epfl.ch/PublicEvent.php?event=1006

# 10th AIMS conference on Dynamical Systems, Differential Equations and Applications.

July 7-11, 2014. Madrid, Spain.

http://www.aimsciences.org/conferences/2014/index.html

#### ICM 2014.

August 13-21, 2014. Seoul, Korea. http://www.mathunion.org/imu-net/archive/2013/imu-net-057/

# IHP Trimester. Geometry, Analysis and Dynamics on Sub-Riemannian Manifolds.

September-December 2014, France.

http://www.cmap.polytechnique.fr/subriemannia n/

### 7 European Congress of Mathematics.

July 18-22, 2016. Berlin, Germany.

http://www.7ecm.de/

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