

Geometry, Mechanics and Control Network Infosheet

September 2016

Editors: Jorge Jover, Cristina Sardón, Rodrigo Sato

CONTENTS

Network's activities

Job offers, fellowships and awards

Ph.D. Offers ...1

Postdoctoral offers ... 2

Offers for senior researchers ... 3

Visiting researchers ... 4

Awards $\dots 6$

Financial support for research projects and conferences ... 7

Interesting news and publications

Network's members 9 and collaborators 9 preprints and papers

Other conferences

GMC Network Infosheet

September 2016

Network's activities

"Nonlinear integrable systems": A workshop to honor Prof. Orlando Ragnisco.

20-22 October 2016, Burgos, Spain.

https://integrabilityworkshop.wordpress.com/

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

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

Funded PhD Scholarships in a great variety of projects.

National University of Ireland Galway (Ireland).

Closing date: 21 October 2016.

http://www.jobs.ac.uk/job/AOF101

PhD position in Differential geometry.

The applicant will carry out research in differential geometry and applications to modern physics.

Università Cattolica del Sacro Cuore (Brescia, Italy).

Closing date: 31 October 2016.

http://wis.kuleuven.be/meetkunde/home

PhD position in Evolutionary Scale-Free Models.

The overall aim is to develop holistic scale-free control methods of controlling complex network systems in the widest sense, and to set the foundations for a new control theory dealing with complex physical networks with an arbitrary size.

Institut National de Recherche en Informatique et en Automatique (France).

Closing date: 31 October 2016.

http://www.all-acad.com/Job/C1705157

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 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

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 (Saragossa, Spain).

Closing date: Open until filled.

jmpena@unizar.es

Postdoctoral fellowships

Postdoc in Shape Theory and Image Reconstruction.

The research associated with the position includes development of theory and implementation of numerical algorithms for joint non-rigid image registration and reconstruction for tomographic inverse problems.

KTH Royal Institute of Technology (Sweden).

Closing date: 3 October 2016.

http://www.all-acad.com/Job/J0206229

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 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-do

ctoral-fellowships

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

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

Closing date: 9 December 2016. http://bgsmath.cat/psphere-2016/

Postdoctoral position in Mathematics.

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

Grenoble University, Lyon University, École Normale in Paris or University of Paris 6 (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-promotion/eth-internal-programmes/eth-fellowships.html

Humboldt Research Fellowship for Post-doctoral Researchers.

6-24 month research programs.

Alexander von Humboldt Foundation.

Closing date: Open.

https://www.humboldt-foundation.de/web/humboldt-fellowship-postdoc.html

Lisa Meitner Program.

FWF Austrian Science Fund.

Vienna (Austria). Closing date: Open.

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

Funded postdoctoral fellowship.

Department of Mathematics and Statistics.

University of Reading. Closing date: Open.

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

Offers for researchers

Lecturer in Mathematics.

Institute of Mathematics and Scientific Computing.

University of Graz (Austria). Closing date: 5 October 2016.

http://jobs.uni-graz.at/en/MB/139/99/3128

7 Lecturer positions.

Applied Mathematics Department (call in BOE-A-2016-8722, in Spanish).

University of Malaga (Spain).

Closing date: 14 October 2016.

http://boe.es/buscar/doc.php?id=BOE-A-2016-8722

Professorship in Pure Mathematics.

Faculty of Science.

University of Zurich (Switzerland).

Closing date: 23 October 2016.

http://www.all-acad.com/Job/J0216577

Assistant Professor.

Institute for Mathematical Sciences.

Stony Brook University (New York, United States).

Closing date: 24 October 2016.

https://www.mathjobs.org/jobs/jobs/8824

Two tenure track positions in Geometry.

Applications for the S.S. Chern Chair, and the J. Simons Chair, sponsored by the Simons Foun-

dation and the Brazilian Ministry of Science and Technology.

Instituto Nacional de Matemática Pura e Aplicada (Brazil).

Closing date: 31 October 2016.

https://www.mathjobs.org/jobs/jobs/8368

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

Tenure track Assistant Professor in pure Mathematics.

Department of Mathematics.

University of Rochester (New York, United States).

Closing date: 1 November 2016 or until filled.

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

Assistant Professor.

Department of Mathematical Sciences.

Binghamton University (New York, United States).

Closing date: 7 November 2016 or until filled.

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

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

Offers for visiting researchers

Fulbright graduate research for US citizens

Fulbright Commission.

Up to 24 awards offered mainly for independent postgraduate research in areas of mutual U.S./Spanish interest.

Only for US citizens.

Closing date: October 11, 2016.

http://www.fulbright.es/convocatorias/ver/1499/graduate-student-research/2017-2018

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: November 1, 2016.

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

Twas: fellowship for research.

The world academy of science.

For researchers from developing countries.

TWAS offers fellowships to young scientists in developing countries to enable them to spend three to 12 months at a research institution in a developing country other than their own.

Closing date: October 2016.

http://twas.org/opportunity/twas-fellowship s-research-and-advanced-training

Invitation Fulbright speakers.

Fulbright Commission.

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

Closing date: July 2016–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.

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.

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/fel lowships

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/appl y-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

Awards

AMTE Award.

Association of Mathematics teachers educators, Closing date: Current nominations open.

https://amte.net/about/awards

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

Noether Lectures.

AWM Association for women in Mathematics Closing date: October 15th, year N for the year N+2 lecture.

https://www.mathprograms.org/db/programs/299

SIAM student paper prize.

The SIAM Student Paper Prize is awarded every year to the student author(s) of the most out-

standing paper(s) submitted to the SIAM Student Paper Competition.

Closing date: February 2017.

https://www.siam.org/prizes/nominations/nom_s tudent.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

Abdus Salam Medal.

The world Academy of Science of developing countries

Closing date: No precise deadline.

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

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: No precise deadline.

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 scientific conferences. SNSF

Deadline: All year round.

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

2018 CIMPA Research Schools call for projects.

CIMPA

Deadline: 1 October, 2016.

http://cimpa.info/actualites/article/2018-cimpa-research-schools-call?lang=fr

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 78.

July 2016.

http://www.mathunion.org/imu-net/archive/2016/imu-net-078/

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/

Info website for Ph.D Students in Mathematics.

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

Jobs for Mathematicians.

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

Offers on Doctoral fellowships and contracts.

http://www.bgsmath.cat/currentopencalls/

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/

Online Encyclopedia of Mathematics.

http://www.encyclopediaofmath.org/index.php/Main_Page

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

Mathematics:http://ocw.mit.edu/courses/onlin
e-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/?s=&positions[]=post-doc&gclid=CI2AgK6-7MUCFc_ItAodMCEAIQ

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.postdocjobs.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
l,http://www.madrimasd.org/

The American Mathematical Society bookstore.

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

Advice for New Ph.D.'s.

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

Courses online of Mathematics, Physics and other disciplines.

Courses from 62 universities

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

Network's members preprints and papers

J. C. Marrero, D. Martín de Diego and E. Martínez: On the exact discrete Lagrangian function for variational integrators: theory and applications.

1608.01586

[math.DG, math-ph, math.MP, math.NA, 17B66, 22A22, 70G45, 70Hxx]

Victor Guillemin, Eva Miranda and Jonathan Weitsman: On geometric quantization of b-symplectic manifolds.

1608.08667

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

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

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

Angel Ballesteros, Juan Carlos Marrero and Zohreh Ravanpak: Poisson-Lie group, bi-Hamiltonian system and integrable deformations. 1609.07438

[math-ph, math.MP]

Martin Callies, Yael Fregier, Christopher L. Rogers and Marco Zambon: *Homotopy moment maps*.

1304.2051 (version 3)

 $[math.DG, \quad math-ph, \quad math.AT, \quad math.MP, \\ math.SG]$

Manuel de León and Hong Wang: Hamilton-Jacobi Theorems for Nonholonomic Reducible Hamiltonian Systems on a Cotangent Bundle. 1508.07548 (version 2)

 $[math.SG,\ math.DG,\ math.DS,\ 70H20,\ 70F25,\\53D20]$

Jordi Gaset and Narciso Román-Roy: Order reduction, projectability and constraints of second-order field theories and higher-order mechanics. 1604.02074 (version 2)

 $[{\rm math\text{-}ph}, \ {\rm math.MP}, \ 70{\rm H}50, \ 53{\rm D}42, \ 55{\rm R}10, \\ 83{\rm C}05]$

V. M. Jiménez, M. de León and M. Epstein: *Lie groupoids and algebroids applied to the study of uniformity and homogeneity of material bodies*. 1607.04043 (version 2)

Network's collaborators preprints and papers

Oğul Esen and Partha Guha: On Geometry of Schmidt Legendre Transformation.

1607.08348 (version 3)

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

Charles-Michel Marle: From tools in symplectic and Poisson geometry to Souriau's theories of statistical mechanics and thermodynamics.

1608.00103

[math.DG, 53D05, 53D20, 70G65, 82B05]

Oğul Esen, Anindya Ghose Choudhury and Partha Guha: On Integrals, Hamiltonian and Metriplectic Formulations of 3D Polynomial Systems.

1608.01507

[math.DG]

[math-ph, math.MP, math.SG, 37K10, 70G45]

Andrew James Bruce and Janusz Grabowski: *Pre-Courant Algebroids*.

1608.01585 (version 2)

 $[math-ph, math.DG, math.MP, math.QA, \\ math.SG, 17A32, 53D17, 58A50]$

Julia Cen, Francisco Correa and Andreas Fring: Time-delay and reality conditions for complex solitons.

1608.01691

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

John Gough, Tudor S. Ratiu and Oleg G. Smolyanov: *Noether theorems and quantum anomalies*.

1608.02366

[math-ph, math.MP]

A. Ghose-Choudhury and Partha Guha: Monotonicity of the period function of the Liénard equation of second kind.

1608.02910

[math-ph, math.MP, 34C14, 34C20]

A. Ghose-Choudhury, Partha Guha, Andronikos Paliathanasis and P. G. L. Leach: *Noetherian symmetries of noncentral forces with drag term*. 1608.03222

[math-ph, math.CA, math.MP, physics.class-ph, 34C14, 34C20]

Fatih Erman, Manuel Gadella and Haydar Uncu: One-Dimensional Semi-Relativistic Hamiltonian with Multiple Dirac Delta Potentials.

1608.04032 (version 2)

[math-ph, math.MP]

Chaiho Rim and Hong Zhang: Nekrasov and Argyres-Douglas theories in spherical Hecke algebra representation.

1608.05027

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

Florio M. Ciaglia, Fabio Di Cosmo, Domenico Felice, Stefano Mancini, Giuseppe Marmo and Juan Manuel Pérez-Pardo: Quantum & Classical Information Geometric Dynamics.

1608.06105

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

Alberto S. Cattaneo: From topological field theory to deformation quantization and reduction.

1608.06576

[math-ph, hep-th, math.MP, math.QA, math.SG, Primary 81T45, Secondary 51P05, 53D55, 58A50, 81T70]

Florio M. Ciaglia, Fabio Di Cosmo, Domenico Felice, Stefano Mancini, Giuseppe Marmo and Juan M. Pérez-Pardo: *Hamilton-Jacobi approach to Potential Functions in Information Geometry*. 1608.06584

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

Bozidar Jovanovic: Noether symmetries and integrability in time-dependent Hamiltonian mechanics.

1608.07788

[math-ph, math.MP, math.SG, 37J15, 37J35, 37J55, 70H25, 70H33]

Darryl D. Holm and Tomasz M. Tyranowski: Stochastic Discrete Hamiltonian Variational Integrators.

1609.00463

[math.NA, math-ph, math.DS, math.MP, math.PR, math.SG, 65C30, G.1.7]

Yi Lin: Hodge theory on transversely symplectic foliations.

1609.00773

[math.SG]

Yi Lin and Xiangdong Yang: Equivariant formality of transversely symplectic foliations and Frobenius manifolds.

1609.00774 [math.SG]

Christopher L. Rogers and Chenchang Zhu: On the homotopy theory for Lie ∞ -groupoids, with an application to integrating L_{∞} -algebras.

1609.01394

[math.AT, math.CT, math.DG]

Bozidar Jovanovic: Symmetries of line bundles and Noether theorem for time-dependent nonholonomic systems.

1609.01965

[math-ph, math.MP, math.SG, 37J15, 37J60, 70F25, 70H25, 70H33]

Luis Álvarez-Cónsul, Indranil Biswas and Oscar García-Prada: A Tannakian approach to dimensional reduction of principal bundles.

1609.03790

 $[{\rm math.AG}, \quad {\rm hep-th}, \quad {\rm math-ph}, \quad {\rm math.DG}, \\ {\rm math.MP}]$

Fabiano G. B. Brito and Icaro Gonçalves: Degree of the Gauss map and curvature integrals for closed hypersurfaces.

1609.04670

[math.DG, 57R25, 57R30, 47H11]

Fabiano G. B. Brito, Andre O. Gomes and Adriana V. Nicoli: A topological lower bound for the energy of a unit vector field on a closed hypersurface of the euclidean space. The 3-dimensional case.

1609.04900

[math.DG]

Richard Montgomery: Constructing the Hyperbolic Plane as the reduction of a three-body problem.

1609.05220

[math.DS, math-ph, math.DG, math.MP, 70F10, 37N05, 70G45]

Fabio Di Cosmo, Giuseppe Marmo, Juan Manuel Pérez - Pardo and Alessandro Zampini: *A Hodge* - *De Rham Dirac operator on the quantum* SU(2). 1609.06276

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

Luca Vitagliano and Aïssa Wade: *Holomorphic Jacobi Manifolds*.

1609.07737

[math.DG, math.CV, math.SG, 53D18, 53C56, 53D10, 53D17, 53D35, 32L05]

Yi Lin: Lefschetz contact manifolds and odd dimensional symplectic geometry.

1311.1431 (version 4)

[math.SG, math.DG, 53Dxx]

Thoan Do and Geoff Prince: An intrinsic and exterior form of the Bianchi identities.

1501.01123 (version 3)

[math.DG, 53B05, 53C05, 53C12, 53D10]

Sumanto Chanda, Partha Guha and Raju Roychowdhury: Taub-NUT as Bertrand spacetime with magnetic fields.

1503.08183 (version 4)

[hep-th, gr-qc, math-ph, math.MP, 37J35, 70H06, 81R12]

M. Asorey, A. P. Balachandran and J. M. Perez-Pardo: *Edge States at Phase Boundaries and Their Stability*.

1505.03461 (version 2)

[math-ph, cond-mat.mes-hall, hep-th, math.MP]

Francesca Arici, Francesco D'Andrea and Giovanni Landi: *Pimsner algebras and circle bundles*.

1506.03109 (version 3)

[math.QA, math-ph, math.MP, 19K35, 55R25, 46L08]

Tara S. Holm and Liat Kessler: Circle actions on symplectic four-manifolds.

1507.05972 (version 2)

[math.SG, Primary: 53D35, Secondary: 53D20, 53D45, 57R17, 57S15]

Giovanni Landi and Pierre Martinetti: On twisting real spectral triples by algebra automorphisms. 1601.00219 (version 2)

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

Tiffany Covolo, Janusz Grabowski and Norbert Poncin: Splitting theorem for \mathbb{Z}_2^n -supermanifolds. 1602.03671 (version 2)

 $[math.DG,\ math-ph,\ math.MP,\ 17A70,\ 58A50,\ 13F25,\ 16L30]$

Pavol Ševera: Poisson-Lie T-duality as a boundary phenomenon of Chern-Simons theory.

1602.05126 (version 6)

[hep-th, math.SG]

Helen Parks and Melvin Leok: Variational integrators for interconnected Lagrange-Dirac systems.

1603.01554 (version 2) [math.NA, math.SG]

Santiago Capriotti: Routh reduction and Cartan mechanics.

1606.02630 (version 2)

[math-ph, math.MP, 53D20, 37J35, 37J15, 70H33]

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 Yang-Mills.

1606.08020 (version 2)

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

H. Hassanabadi, M. Hosseinpour and M. de Montigny: Duffin-Kemmer-Petiau equation in curved space-time with scalar linear interactions.

1607.01418 (version 2) [math-ph, math.MP]

Alberto S. Cattaneo and Michele Schiavina: On time.

1607.02412 (version 2)

[math-ph, gr-qc, hep-th, math.MP, math.SG, 81T70 (Primary) 70805, 83C47, 81T45 (Secondary)]

Henry Kißler and Dirk Kreimer: Diagrammatic Cancellations and the Gauge Dependence of QED.

1607.05729 (version 2)

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

QMath â Mathematical Results in Quantum Physics.

1–8 October, 2016. Atlanta, USA.

http://qmath13.gatech.edu/

The Mathematics of disorder.

4-8 October, 2016. Bonn, Germany.

http://www.iam.uni-bonn.de/disorderyw2016/

Second French-Russian conference on Random Geometry and Physics.

17–21 October, 2016. Institut Henri Poincare, Paris, France.

http://www.rivasseau.com/RGPHomepage.html

Nonlinear integrable systems- a workshop to honor Orlando Ragnisco 70th anniversary.

20-22 October, 2016. Burgos, Spain.

https://integrabilityworkshop.wordpress.com/

IMA Annual Program Workshop: Mathematical and Physical Models of Nonlinear Optics.

31 October–4 November 2016. IMA, University of Minnesota, Minneapolis, United States.

http://www.ima.umn.edu/2016-2017/W10.31-11.4.16/

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

UFBS16 â Universality in Few-Body Systems.

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

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

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 Göttingen, Germany.

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

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.

16–20 January 2017, Tenerife, Islas Canarias, Spain.

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

ICCP10 â 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 February 2017. Bangkok. Thailand.

http://thaihep.phys.sc.chula.ac.th/BKK2017DSCR/

SLE, GFF and LQG in NYC.

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

AdS3/CFT2-GGI2017 â 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

INI Workshop HTLW03 â Physics and knot homologies.

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

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

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