



**Geometry, Mechanics and
Control Network
Infosheet**

May 2011

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July 18-22, 2011

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Network's activities

V International Summer School on Geometry, Mechanics and Control

La Cristalera, Madrid, Spain
July 4-8, 2011

<http://www.gmcnetwork.org/ssgmc11>

Abstract submission for short talks and posters: May 31, 2011

XX International Fall Workshop on Geometry and Physics

ICMAT, Madrid, Spain.
August 31-September 3, 2011.

<http://www.icmat.es/congresos/xxifwgp>

Deadline submission for contributed talks and posters: May 20, 2011

VI International Young Researchers Workshop on Geometry, Mechanics and Control

Coimbra, Portugal
December 2011.

Job offers, fellowships and awards

PhD offers

PhD scholarships.

Universidad Autónoma de Madrid, Spain.

Closing date: May 24, 2011.

<http://verso.mat.uam.es/web/>

Graduate Teaching Assistanships

School of Mathematics and Statistics.

University of Sheffield, UK.

Closing date: Jul. 29, 2011.

<http://www.jobs.ac.uk/job/ACB687/graduate-teaching-assistantships-gtas/>

SADCO call for applications to PhD

The newly started project Marie Curie Initial Training Network "Sensitivity Analysis for Deterministic Controller Design" – SADCO (see the WEB site <http://itn-sadco.inria.fr/>), funded by the European Union, offers several very well paid PhD and post-doc positions as well as funding for scientific activities. Good students are encouraged to submit their candidature on several topics related to control theory and games. There is a new call for applications for candidates starting their activity on September-October 2011. Some of the grants will be hosted at the Department of Mathematics, Universita' di Roma "La Sapienza". In particular, we offer:

1 PhD student grant (3 years) on Numerical schemes for Hamilton-Jacobi equations.

1 PhD student grant (3 years) on Asymptotics of Hamilton–Jacobi equations in the stationary ergodic case.

According with the EU rules, the hired person is supposed to spend, within the three years of the position, six months in the "secondment" institution, which is indicated in the call for applications:

<http://itn-sadco.inria.fr/available-positions>

The salary for a PhD student, for example, consists of two parts: one is fixed (33,000 euros per year), whereas the other is automatically computed according to some parameters (country, age, status, ..). The total amount should be in average at least 40,000 euros per year, before taxes.

The Department of Mathematics at the University "La Sapienza" offers a very good environment in Control, PDE's and Numerical Analysis (see <http://www.mat.uniroma1.it/>). In order to apply, the candidates should follow carefully the instructions appearing in the site.

Postdoctoral fellowships

Postdoctoral Fellowship in Geometric Numerical Integration of Differential Equations

La Trobe University

Closing date: June 17, 2011

<http://www.austms.org.au/Jobs/Academic723.html>

Grants for short postdoctoral research visits at IMUS

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. In this edition, grants are offered for post-doctoral stays in the IMUS for a total duration of 5 months. The stays will take place between January 1st, 2011 and July 31st, 2012.

Closing date: July 31, 2011.

<http://www.imus.us.es/pdf/estancias-IMUS-2011-en.pdf>

Marie-Curie Actions Calls: FP7-PEOPLE-2011-IEF, FP7-PEOPLE-2011-IOF, FP7-PEOPLE-2011-IIF

Closing date: August 11, 2011.

<http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7CallsPage#Marie-Curie%20Actions>

6 postdoctoral fellowships by SADCO network (Sensitivity Analysis for Deterministic Controller Design).

Different locations in Europe: Paris, Louvain, Bayreuth, Padova, Rome, Porto, London.

Research topics: Control theory, stabilization and optimization of nonlinear systems, Hamilton-Jacobi theory, differential games, perturbed systems, numerical analysis.

Latest deadline: October 31, 2011.

<http://itn-sadco.inria.fr/available-positions>

Postdoc Position at LAAS-CNRS, Univ. Toulouse, France

We are seeking candidates for a one-year post-doctoral position at LAAS-CNRS, University of Toulouse, France, within an ongoing project focusing on semidefinite programming and algebraic geometry for polynomial optimal control. The project may focus on software implementation (under our existing Matlab toolbox GloptiPoly for solving generalized problems of moments), transfer of knowledge to the French aerospace industry (contracts with EADS Astrium and the French space agency CNES), or more fundamental research activities covering real algebraic geometry (polynomial equations and inequalities), functional analysis (theory of moments), mathematical programming (convex optimization over the cone of positive semidefinite matrices), and nonlinear dynamical systems control. A strong background in applied mathematics is required. Some knowledge of systems control is welcome.

Interested candidates please send your detailed curriculum vitae to Didier Henrion, <http://homepages.laas.fr/henrion>

Offers for visiting and senior researchers

Lecturer/Senior Lecturer (Two Positions)

Department of Mathematics

Faculty of Computing and Mathematics Sciences

University of Waikato

Closing date: June 10, 2011

<http://www.math-jobs.com/j.php?i=1329>

Full professor of Applied Mathematics and Modelling

University of Vienna.

Closing date: June 10, 2011.

The University of Vienna intends to increase the number of women on its faculty, particularly in high-level positions, and therefore specifically invites applications by women. Among equally qualified applicants women will receive preferential consideration.

Successful candidates will have the following qualifications:

* PhD and post-doctoral experience at a university or other research institution (Austrian or equivalent international academic degree in the relevant field)

* Outstanding research and publication record, with an excellent reputation as an active member in the international academic community -(Habilitation (venia docendi) or equivalent international qualification in the relevant field is desirable)

* Experience in designing, procuring and directing major research projects, and willingness and ability to assume the responsibility of team leadership

* Experience in university teaching, and willingness and ability to teach at all curricular levels, to supervise theses, and to further the work of junior academic colleagues

The University of Vienna expects the successful candidate to acquire, within three years, proficiency in German sufficient for teaching in Bachelor programmes and participation in committees.

Applications in English should be submitted by email (preferably as PDF attachments) to the Dean's office of the Faculty of Mathematics of the University of Vienna, Nordbergstrasse 15, A-1090 Vienna, dekanat.mathematik@univie.ac.at, no later than **June 10th, 2011** with reference DK 506-07/2011.

Grant for inviting Fulbright speakers.

Grant for Spanish institutions to invite American Fulbright lecturers for a maximum period of two weeks

Deadline for applications: June 29, 2011

<http://www.fulbright.es/programas/ayudas-institucionales/ayudas-para-invitar-a-conferenciantes-fulbright/2010-2011>

Lecturer, Associate Professor, Professor.

School of Science, Department of Mathematics and Applied mathematics, Tianjin University, China.

Closing date: Aug. 29, 2011.

[http://sciences.academickeys.com/seeker_job_display.php?dothis=display&job\[IDX\]=28518-SC110120m-8e&oid=0](http://sciences.academickeys.com/seeker_job_display.php?dothis=display&job[IDX]=28518-SC110120m-8e&oid=0)

2 Full-time Tenure-track Positions in Applied Mathematics

University of Maryland Eastern Shore Princess Anne, MD, USA. Position Start Date: August 2011

Closing date: Open until filled.

[http://sciences.academickeys.com/seeker_job_display.php?dothis=display&job\[IDX\]=28101-SC110131w-8e&oid=790411](http://sciences.academickeys.com/seeker_job_display.php?dothis=display&job[IDX]=28101-SC110131w-8e&oid=790411)

Visiting Research at IMI. Call 2011

Instituto de Matemática Interdisciplinar
Universidad Complutense de Madrid

This call aims to enhance cooperation between IMI researchers and high level researchers and promising young students carrying out their activity in other scientific institutions, in Spain or abroad. During their stays, visitors will collaborate with host IMI Program activities. The following modalities will be considered:

- Senior Visiting Researchers
- Postdoctoral stays
- Predoc Internships
- Exploratory meetings

The call will be open permanently. Evaluation and awarding is expected to be made on a monthly basis.

More information:

http://www.mat.ucm.es/IMI/ProgramaVisitantesIM2011/Call_IMIVisitingResearchers_2011.pdf

Awards

Spanish research "Julio Rey Pastor" award.

(BOE number 85, March 15, 2011).

Deadline: May 31, 2011.

<http://www.micinn.es/portal/site/MICINN/menuitem.edc7f2029a2be27d7010721001432ea0/?vgnexoid=fa8e9e735944f210VqnVCM1000001d04140aRCRD>

Fundación BBVA Award: "Fronteras del Conocimiento"

Deadline: June 30, 2011

<http://www.fbbva.es/TLFU/tfu/esp/microsites/premios/fronteras/presentacion/index.jsp>

Candidate proposals for EMS awards.

Deadline: November 1, 2011.

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

Candidate proposals for Otto Award.

Deadline: December 31, 2011

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

Scientific "Joan Lluís Vives" Award.

For PhD students about to defend the thesis.

<http://www.vives.org/pcc/>

Felix Klein Award 2012

Deadline: December 31, 2011

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

Ciencia en Acción Competition

<http://www.cienciaenaccion.org/>

Financial support for research projects and conferences

ESF Exploratory Workshops awards

These awards are intended for small, interactive and output-oriented discussion meetings of minimum 15, maximum 30 participants and up to a maximum value of 15000 EUR. Awards are for workshops to be held in the calendar year 2012 (1 February - 31 December).

Deadline for receipt of proposals: 26 May 2011 (16:00 CET).

Full details at <http://www.esf.org/workshops>

i-MATH Financial support 2011 for activities that will take place before October 30, 2011.

Closing date: June 30, 2011.

<http://www.i-math.org/?q=en/extraordinary-call>

Marie Curie Career Integration Grants (GIG)

Deadlines:

- ✓ September 6, 2011 at 17:00 (Brussels local time)

More information:

http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=usersite.FP7DetailsCallPage&call_id=379

Financial support for organization of conferences by Spanish Ministry of Science and Innovation.

Closing date: from April 15, 2011 to June 30, 2011; from July 1, 2011 to October 25, 2011.

http://www.boe.es/diario_boe/txt.php?id=BOE-A-2010-19639

2013 ICPAM-CIMPA research schools call for projects

Deadlines:

- ✓ For pre-proposal: June 15, 2011.
- ✓ Complete proposal: October 1, 2011.

More information:

<http://www.cimpa-icpam.org/spip.php?article124>

Complementary actions for non-guided fundamental research projects.

National Program for Fundamental Research Project

Deadline for submission depending on the offer: for the first five types from April 15, 2011 to June 30, 2011; July 7, 2011 to October 25, 2011; for the modality F only the first two periods and for type G only the first of those periods

More information:

<http://www.micinn.es/portal/site/MICINN/menuitem.m.dbc68b34d11ccb5d52ffeb801432ea0/?vgnnextoid=f02093ee6b80d210VgnVCM1000001d04140aRCRD&vgnnextchannel=3acb282978ea0210VgnVCM1000001034e20aRCRD>

Interesting news and publications

The IRSES Network 'GEOMECH'

GEOMECH is an IRSES network sponsored within the 7th EU Framework Program and is coordinated by Ghent University. It includes partners from Argentina, Belgium, Czech Republic, Japan, Spain and the USA and it aims to facilitate research exchange visits between these partners. More information on the network can be found on the website

<http://www.geomechnetwork.ugent.be/> The website will also serve as the forum where the network's activities and outcomes will be disseminated.

Matemáticas y sus fronteras

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

Those interested in publishing something, contact with Manuel de León mdeleon.dos@gmail.com

Journal of Geometric Mechanics (JGM)

Vol. 3, n. 1, March 2011.

<http://aimsciences.org/journals/displayPapers1.jsp?pubID=436>

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

<http://www.ndltd.org/find>

Professional network for scientists.

<http://www.researchgate.net/>

Network's members preprints and papers

J.F. Cariñena, J. de Lucas: Superposition rules and second-order Riccati equations. Journal of Geometric Mechanics, vol. 3, n. 1, March 2011.

<http://aimsciences.org/journals/displayPapers1.jsp?pubID=436>

N. Román-Roy, A. M. Rey, M. Salgado, S. Vilariño: On the k-symplectic, k-cosymplectic and multisymplectic formalisms of classical field theories. Journal of Geometric Mechanics, vol. 3, n. 1, March 2011.

<http://aimsciences.org/journals/displayPapers1.jsp?pubID=436>

Network's collaborators preprints and papers

M. Crampin, T. Mestdag: Reduction of invariant constrained systems using anholonomic frames. Journal of Geometric Mechanics, vol. 3, n. 1, March 2011.

<http://aimsciences.org/journals/displayPapers1.jsp?pubID=436>

Other conferences

Workshop on Lie groups, Lie algebras and their representation.

May 21-22, 2011. Riverside, California, USA.

<http://math.ucr.edu/~lietheory/workshop2011.shtml>

SIAM Conference on Applications of Dynamical Systems.

May 22-26, 2011. Snowbird, Utah, USA.

<http://www.siam.org/meetings/ds11/>

Progress on Difference Equations.

May 22-27, 2011. Dublin, Ireland.

<http://www.dcu.ie/mathspode2011/index.shtml>

Partial differential equations in Mathematical Physics.

May 26-27, Moscow, Russia.

http://158.250.33.149/petr/php/home_page_eng.php

XI Congreso Dr. Antonio Monteiro.

May 26-28. Universidad Nacional del Sur/CONICET. Bahía Blanca, Argentina.

<http://www.matematica.uns.edu.ar/XICongresoMonteiro/spanish.php>

Summer School and Conference on Contact and Symplectic Geometry.

May 30- June 17, 2011. Nantes University, France.
<http://yann.rollin.free.fr/tcst.php?page=home>

Jornadas sobre los Problemas del Milenio.

June 1-3, 2011. University of Barcelona, Spain.
<http://garf.ub.es/milenio/>

XIII Internacional Conference Geometry, Integrability and Quantization.

June 3-8, 2011. Varna, Bulgaria.
<http://www.bio21.bas.bg/conference/>

Folding and Unfolding: Interactions from Geometry: 65th birthday of Giuseppe Marmo.

June 8-12, 2011. Ischia, Hotel Continental Terme, Italy.

ESF Exploratory Workshop on Current Problems in Differential Calculus over Commutative Algebras, Secondary Calculus, and Solution Singularities of Nonlinear PDEs

June 13-16, 2011, Vietri sul Mare (Italia)
<http://sites.google.com/site/levicivita/institute/Activities/workshops/ESF-EW-2011>

Poisson Geometry and Applications conference

June 13-16, 2011. Figueira da Foz, Portugal.
<http://www.mat.uc.pt/~poissonga/>

Future directions in difference equations.

June 13-17, 2011. Vigo, Spain.
<http://sites.google.com/site/fdde2011/home>

87th Encounter between Mathematicians and Theoretical Physicists: Lorentz geometry in Mathematics and in Physics.

June 16-18, 2011. University of Strasbourg, France.
<http://www-irma.u-strasbg.fr/article1044.html>

Conference on Geometry: Theory and Applications.

June 20-24, 2011. Stift Vorau, Styria, Austria.
<http://www.ag.jku.at/vorau2011>

9th edition of the International Workshop "Lie Theory and Its Applications in Physics"

June 20-26, 2011. Resort "Chaika", near Varna, on the Black Sea, Bulgaria.
It is a meeting intended for both physicists and mathematicians.

Contact information: dobrev@inrne.bas.bg

Mathematische Arbeitstagung 2011 BONN (D. Zagier's 60th birthday)

June 24-30, 2011, Max Planck Inst. for Mathematics, Germany.

<http://www.mpim-bonn.mpg.de/node/2866>

XXX Workshop on Geometric Methods in Physics.

June 26-July 2, 2011. Bialowieza, Poland.
<http://wgmp.uwb.edu.pl/index.html>

Dyson-Schwinger Equations and Faà di Bruno Meeting on Hopf Algebras in Physics and Combinatorics.

June 27 - July 1, 2011, IRMA, Strasbourg, France.
<http://www.th.physik.uni-bonn.de/people/fard/dsfdb2011/>

Geometry of Manifolds and Mathematical Physics to celebrate the 80th birthday of Włodzimierz Tulczyjew

June 27-July 1, 2011. Krakow,
<http://www.im.uj.edu.pl/dgmp2011>

GESTA 2011: New Trends in Symplectic and Contact Geometry.

June 27-July 1, 2011. CIEM, Castro Urdiales, Spain.
<http://www.upc.edu/gesta/lecturers.html>

50th Séminaire de mathématiques supérieures: Metric Measures Spaces: Geometric and Analytic Aspects.

June 27 – July 8, 2011. Université de Montréal, Canada.

http://www.dms.umontreal.ca/~sms/Metric11/index_e.php

American Control Conference.

June 29-July 1, 2011. San Francisco, California, USA.
<http://a2c2.org/conferences/acc2011/>

Thematic Program on Discrete Geometry and Applications.

July-December 2011. Fields Institute, Toronto, ON, Canada.

<http://www.fields.utoronto.ca/programs/scientific/11-12/discretegeom/index.html>

ESF-EMS-ERCOM Mathematics Conference: Completely Integrable Systems and Applications.

July 3-8, 2011. Erwin Schrödinger Institute, Vienna, Austria.

<http://www.esf.org/index.php?id=7348>

Gauge theory and complex geometry.

July 4-23, 2011. University of Leeds, UK.
<http://www.maths.leeds.ac.uk/pure/geometry/gtgc/>

The 2011 International Conference of Applied and Engineering Mathematics.

July 6-8, 2011. Imperial College London, UK.
<http://www.euro-math-soc.eu/node/710>

International Congress on Industrial and Applied Mathematics: Marsden Memorial minisymposium.

July 18-22, 2011, Vancouver, BC, Canada.

<http://www.iciam2011.com/>

Workshop on Rough Paths and Combinatorics in Control Theory.

July 25-27, University of California, San Diego, USA.

<http://www.th.physik.uni-bonn.de/people/fard/RPCCT2011/>

SIAM Conference on Control and Its Applications

July 25-27, 2011. Hyatt Regency Baltimore, Baltimore, Maryland, USA.

<http://www.siam.org/meetings/ct11/>

3rd International Conference on Control and Optimization with Industrial Applications – COIA 2011

August 22-24, 2011. Bilkent University, Ankara, Turkey

<http://www.ee.bilkent.edu.tr/~coia2011>

18th World Congress of the International Federation of Automatic Control (IFAC)

August 28-September 2, 2011. Milano, Italy.

<http://www.ifac2011.org/>

VI International Meeting on Lorentzian Geomtry.

September 6-9, 2011. Granada, Spain.

<http://gigda.ugr.es/gelogra/>

Satellite Meeting Unravelling and Controlling Discrete Dynamical Systems

September 12-16, 2011. Vienna, Austria.

<http://www.disdysys.ugent.be/>

Conference on Geometric Structures in Mathematical Physics.

September 19-26, 2011. Albena, Bulgaria.

<http://www.fmi.uni-sofia.bg/ivanovsp/MathPhys2011.html>

Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems, together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies.

September 25-28, 2011. Krems, Austria.

<http://www.dmg.tuwien.ac.at/OMG/OMG-Tagung/>

International Conference Kolmogorov Readings: General control problems and their applications (GCP - 2011)

October 10-14, 2011. Tambov, Russia.

<http://www.tambovopu2011.narod.ru/>

Workshop on Algebra Geometry Mathematical Physics.

October 24-26, 2011. Mulhouse, France.

Registration deadline: September 30, 2011.

<http://www.agmp.eu/mul11/>

50th IEEE Conference on Decision and Control and European Control Conference.

December 12-15, 2011. Orlando, Florida.

<http://control.disp.uniroma2.it/cdcecc2011>

NOTE: if you want to include information in this infosheet, please send it to gmcnet@ull.es