



**Geometry, Mechanics and  
Control Network  
Infosheet**

**February 2011**

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and Silvia Vilarino**

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# GMC Network Infosheet

February 2011

## Network's activities

### **XIII Winter Meeting on Geometry, Mechanics and Control and Thematic day on Field Theory**

Zaragoza, Spain

Winter Meeting: January 26-27, 2011

Thematic day: January 28, 2011

PDF files available in:

<http://andres.unizar.es/~ei/2011/Contribuciones/> and

<http://andres.unizar.es/~ei/2011/ContribucionesJ/>

### **V International Summer School on Geometry, Mechanics and Control**

La Cristalera, Madrid, Spain

July 4-8, 2011

**Important dates:**

- Registration: May 15, 2011
- Accomodation: May 15, 2011
- Scholarships: April 15, 2011

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

### **XX International Fall Workshop on Geometry and Physics**

ICMAT, Madrid, Spain.

August 31-September 3, 2011.

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

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

### **VI International Young Researchers Workshop on Geometry, Mechanics and Control**

Coimbra, Portugal

December 2011.

## Job offers, fellowships and awards

### PhD offers

#### **JAE PREDOC 2011**

**Deadline: March 5, 2011.**

<http://www.boe.es/boe/dias/2011/02/03/pdfs/BOE-A-2011-2088.pdf>

<https://sede.csic.gov.es/servicios/formacion-y-empleo/formacion-de-personal-investigador/2011/jae-predoc-2011>

#### **MAEC Scholarships for Spanish Citizenships.**

Ministry of International Cooperation.

**Deadline: from January 1, 2011 to January 28, 2011; March 1-15, 2011.**

[http://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2010-19529](http://www.boe.es/diario_boe/txt.php?id=BOE-A-2010-19529)

<http://www.aecid.es/web/es/becas/becas/>

#### **Eu-SPRI PhD Circulation Award**

Call for proposals for doctoral researchers.

This call is open to doctoral reserchers in their second year of PhD thesis or beyond (and early stage researchers, who have completed their PhD within the past 12 months, in exceptional circumstances)

**First submission deadline: March 18, 2011**

More information:

[http://www.ull.es/Private/folder/institucional/ull/wull/investigacion/novedades/doctoral\\_researches.pdf](http://www.ull.es/Private/folder/institucional/ull/wull/investigacion/novedades/doctoral_researches.pdf)

## Loan University Program to do a master or a PhD in Spain.

Ministry of Education.

Deadline: from December 22, 2010 to March 31, 2011.

[http://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2010-19475](http://www.boe.es/diario_boe/txt.php?id=BOE-A-2010-19475)

## Graduate Teaching Assistships

School of Mathematics and Statistics.

University of Sheffield, UK.

Closing date: Feb. 25, Apr. 29, Jul. 29, 2011.

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

## Postdoctoral fellowships

### UPC Postdoctoral

Barcelona, Spain.

Closing date: March 7, 2011.

### Postdoc Position in Systems and Control.

INRIA Grenoble Rhône-Alpes, France

Closing date: March 15, 2011.

<http://www.gipsa-lab.fr/~christophe.prieur/postdoc.pdf>

### Fellowship in Pure Mathematics

Robinson Collage, University of Cambridge, UK,

Closing date: March 16, 2011.

<http://jobs.ac.uk/job/ACF821/>

### Post-doctoral Research Assistant

University of Reading

Department of Mathematics and Statistics

Closing date: March 16, 2011

<http://www.jobs.ac.uk/job/ACG938/>

### Lecturer in Fluid Flow Control

University of Liverpool

Faculty of Science and Engineering

School of Engineering

Closing date: March 18, 2011

<http://www.jobs.ac.uk/job/ACG605/>

### Postdoctoral Research Associate- Dynamical Systems and Partial Differential Equations

University of Sydney

School of Mathematics and Statistics

Closing date: March 20, 2011

<http://www.jobs.ac.uk/job/ACH313/>

### Grants for postgraduate studies in Life and Matter Sciences in foreign universities and research centers

#### Fundación Ramón Areces

Applications deadline: March 31, 2011

<http://www.fundacionareces.es/fundacionareces/cargarAplicacionAgendaEventos.do?idTipoEvento=3&texto=&idSubtipoEvento=0&fechaInicio=&identificador=1158&fechaFinalizacion=&nivelAgenda=2#d>

### University Lectureship in Multiphase Flow

BP Institute

University of Cambridge

Closing date: April 15, 2011

<http://www.jobs.ac.uk/job/ACH121/>

## Stat Faculty Positions

Center of Mathematical Sciences and Department of  
Mathematical Sciences in Tsinghua University

All areas pure math, appl math, sta.

Closing date: April 30, 2011

<http://www.math-jobs.com/j.php?i=277>

## 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 1<sup>st</sup>, 2011 and July 31<sup>st</sup>, 2012.

Closing date: July 31, 2011.

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

## 6 postdoctoral fellowships by SADC 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>

## Offers for visiting and senior researchers

### Assistant Professor in Mathematics

Cape Breton University, Sydney, NS, Canada.

Closing date: March 7, 2011.

<http://cms.math.ca/Employment/acad/937>

### Full-time or Visiting Academic Staff

Faculty of Engineering

Basic Sciences Department

British University in Egypt

Closing date: March 10, 2011

<http://jobs.ac.uk/job/ACC682/>

### Tenure-Track Position in Pure Mathematics

Wilfrid Laurier University, Waterloo, ON, Canada.

Closing date: March 15, 2011.

<http://info.wlu.ca/academic/postings/item/03162011FriJan7141012EST2011.html>

### Senior Lecturer/Lecturer

University of Sussex

Mathematical and Physical Sciences

Closing date: March 21, 2011

<http://www.jobs.ac.uk/job/ACH480/>

### Assistant Professor in mathematics

Mathematics Department PUC-RIO (Catholic  
University of Rio de Janeiro)

Closing date: April 15, 2011

[http://www.rsme.es/comis/prof/Ofertas/Assistant\\_Profesor\\_PUC\\_Rio.pdf](http://www.rsme.es/comis/prof/Ofertas/Assistant_Profesor_PUC_Rio.pdf)

### 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 Programme activities. The following modalities will be considered:

- a) Senior Visiting Researchers
- b) Postdoctoral stays
- c) Predoc Internships
- d) Exploratory meetings

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

Closing date: Open permanently

More information:

[http://www.mat.ucm.es/IMI/ProgramaVisitantesIMI2011/Call\\_IMIVisitingResearchers\\_2011.pdf](http://www.mat.ucm.es/IMI/ProgramaVisitantesIMI2011/Call_IMIVisitingResearchers_2011.pdf)

### Awards

#### Scientific "Joan Lluís Vives" Award.

For PhD students about to defend the thesis.

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

### Financial support for research projects and conferences

#### Marie Curie Career Integration Grants (GIG)

Deadlines:

- ✓ March 8, 2011 at 17:00 (Brussels local time)
- ✓ 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](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 January 15, 2011 to April 14, 2011; 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](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 Programme for Fundamental Research Project

Deadline for submission depending on the offer: for the first five types from January 25, 2011 to April 14, 2011; 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.dbc68b34d11ccbd5d52ffeb801432ea0/?vgnextoid=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 [www.geomechnetwork.ugent.be](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](mailto:mdeleon.dos@gmail.com)

#### Journal of Geometric Mechanics (JGM)

Vol. 2, n. 4, December 2010.

[http://aimsciences.org/journals/displayPapers1.jsp?pu\\_bID=412](http://aimsciences.org/journals/displayPapers1.jsp?pu_bID=412)

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

L. Abrunheiro, M. Camarinha, J. Clemente-Gallardo :  
Cubic polynomials on Lie groups: reduction of the  
Hamiltonian system.  
[arXiv:1102.2324v1](http://arxiv.org/abs/1102.2324v1) [math.OC]

L. Abrunheiro, M. Camarinha, J. F. Cariñena, J.  
Clemente-Gallardo, E. Martínez, P. Santos: Some  
applications of quasi-velocities in optimal control  
[arXiv:1102.2203v1](http://arxiv.org/abs/1102.2203v1) [math.OC]

J. F. Cariñena, J. de Lucas: Superposition rules and  
second-order differential equations.  
[arXiv:1102.1299v1](http://arxiv.org/abs/1102.1299v1) [math-ph]

Eva Miranda, Philippe Monnier, Nguyen Tien Zung:  
Rigidity of Hamiltonian actions on Poisson manifolds  
[arXiv:1102.0175v1](http://arxiv.org/abs/1102.0175v1) [math.SG]

### Network's collaborators preprints

U. Boscain, F. Chittaro, P. Mason, M. Sigalotti :  
Adiabatic control of the Schrödinger equation via  
conical.  
[arXiv:1102.3063v1](http://arxiv.org/abs/1102.3063v1) [math.OC]

F. Dorfler, F. Bullo: Reduction of graphs with  
applications to electrical networks.  
[arXiv:1102.2950v1](http://arxiv.org/abs/1102.2950v1) [math.CO]

J. Vankerschaver, H. Yoshimura, M. Leok: On the  
Geometry of Multi-Dirac Structures and Gerstenhaber  
Algebras.  
[arXiv:1102.2835v1](http://arxiv.org/abs/1102.2835v1) [math.DG]

L. C. Andrés, M. Fernández, S. Ivanov, J. A.  
Santisteban, L. Ugarte, D. Vassilev : Bianchi type A  
hyper-symplectic metrics, gravitational instantons and  
their duality.  
[arXiv:1102.1518v1](http://arxiv.org/abs/1102.1518v1) [math.DG]

Janusz Grabowski, Mikolaj Rotkiewicz: Homogeneity  
bundles.  
[arXiv:1102.0180v1](http://arxiv.org/abs/1102.0180v1) [math.DG]

U. Boscain, M. Caponigro, T. Chambrion, M. Sigalotti:  
A weak spectral condition for the controllability of the  
bilinear Schrödinger equation with application to the  
control of a rotating planar molecule.  
[arXiv:1101.4313v1](http://arxiv.org/abs/1101.4313v1) [math.OC]

### Other conferences

**2011 EECI Graduate School on Control**  
January-May, 2011, Paris, France.  
<http://www.eeci-institute.eu/GSC2011>.

**Thematic month on complex and  
Riemannian Geometry.**  
January 31-March 4, 2011. Luminy, France.  
[http://www.latp.univ-  
provence.fr/geom2011/index.php/welcome](http://www.latp.univ-provence.fr/geom2011/index.php/welcome)

**Great Lakes Geometry Conference 2011**

March 5-6, 2011. Ohio State University, Columbus,  
USA.

[http://www.math.ohio-  
state.edu/~hhtseng/glgc11\\_main.html](http://www.math.ohio-state.edu/~hhtseng/glgc11_main.html)

**GEDYTO: Geometrical Methods in  
Dynamics and Topology.**

April 18-22, 2011. Hanoi, Vietnam.

<http://www-ma1.upc.es/~miranda/hanoi/conference/>

**Workshop Discrete, Tropical and Algebraic  
Geometry.**

May 5-7, 2011. Goethe-Universität Frankfurt am Main,  
Germany.

<http://www.math.uni-frankfurt.de/geometry2011/>

**SIAM Conference on Applications of  
Dynamical Systems.**

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

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

**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: 65<sup>th</sup> birthday of Giuseppe  
Marmo.**

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

**Poisson Geometry and Applications  
conference**

June 13-16, 2011. Figueira da Foz, Portugal.

<http://www.mat.uc.pt/~poissonga/>

**87<sup>th</sup> 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.

**Deadline : March 31, 2011, Abstract submission.**

<http://www.ag.jku.at/vorau2011>

**9<sup>th</sup> 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](mailto:dobrev@inrne.bas.bg)

**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>

**50<sup>th</sup> 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](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

**Deadline for applications: April 20, 2011.**

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

**SIAM Conference on Control and Its Applications**

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

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

**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 Geometry.**

September 6-9, 2011. Granada, Spain.

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

**50<sup>th</sup> IEEE Conference on Decision and Control and European Control Conference.**

December 12-15, 2011. Orlando, Florida.

**Submission Due: March 15, 2011.**

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

**NOTE: if you want to include information in this infosheet, please send it to [gmcnnet@ull.es](mailto:gmcnnet@ull.es)**