



**Geometry, Mechanics and  
Control Network  
Infosheet**

**March 2011**

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# GMC Network Infosheet

March 2011

## Network's activities

### **Seminario Teen de Geometría**

Minicourse: "Teoría de la Reducción". Prof. Miguel Rodríguez Olmos.  
Thursday, March 10-31  
15:30- 17:00 h, Aula 102 , FME, Barcelona, Spain.  
<http://www.ma1.upc.edu/~miranda/seminariteen.htm>

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

La Cristalera, Madrid, Spain  
July 4-8, 2011  
<http://www.gmcnetwork.org/ssgmc11>

#### **Important dates:**

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

#### **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 Assistanships**

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-assistantships-gtas/>

#### **Fulbright scholarships for the academic year 2012-2013**

Fulbright scholarships are for young graduates who are interested in programs for Master's, Ph. D. or exceptionally in predoctoral research projects at USA universities.  
Deadline for applications: April 6, 2011  
<http://www.fulbright.es/programas/programa-espanol/ampliacion-de-estudios/2012-2013>

## Postdoctoral fellowships

### **2-year postdoctoral fellowship in "Centre de Physique Theorique", Marseille, France.**

Topic: "Hamiltonian Methods in Plasma Physics & Gyrokinetics". The candidate will work in institute "Centre de Physique Theorique" in Marseille, France (on the Mediterranean coast) and will also interact with the CEA in Cadarache (near the ITER project).

Some experience in Hamiltonian mechanics and plasma physics are required to study the gyrokinetics theory.

The candidates should send a Curriculum to [Vittot@cpt.univ-mrs.fr](mailto:Vittot@cpt.univ-mrs.fr)

### **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>

### **Three year mathematics position at U of Lethbridge with possibility of conversion to tenure-track**

Department of Mathematics and Computer Science  
University of Lethbridge

The closing date for the competition is March 31, 2011 or until the position is filled.

We consider all replies to this advertisement, but only short-listed applicants will be contacted.

<http://www.uleth.ca/fas/mcs/2011%20job%20ad.htm>

### **Postdoctoral position in Applied Mathematics**

Department of Mathematics  
Wilfrid Laurier University

Closing date: April 1, 2011.

More information:

<http://www.austms.org.au/Jobs/Academic711.html>

### **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>

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

Closing date: August 11, 2011-03-22

<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>

## Offers for visiting and senior researchers

### **Iberoamerican Scholarship Teachers and Young Researchers**

Closing date: April 10, 2011

<http://www.becas-santander.com/>

### **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 in Applied Mathematics**

Department of Mathematical Sciences  
Durham University

Closing date: April 26, 2011

<http://www.jobs.ac.uk/job/ACJ198/>

### **Aid to invite speakers Fulbright**

Aid to 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 Programme 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/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.dbc68b34d11ccb5d52ffeb801432ea0/?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://aims sciences.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:1102.2324v1) [math.OG]

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:1102.2203v1) [math.OG]

J. F. Cariñena, J. de Lucas: Superposition rules and second-order differential equations.  
[arXiv:1102.1299v1](http://arXiv: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>.

**SCM-CRM Conferences on Mathematics and  
Science**  
April 7 and 14, 2011, Barcelona, Spain.  
<http://scm.iec.cat>

**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/>

**XI Congreso Dr. Antonio Monteiro.**  
May 26-28. Universidad Nacional del Sur/CONICET.  
Bahia Blanca, Argentina.  
**Deadline for submissions: April 15, 2011**  
<http://www.matematica.uns.edu.ar/XICongresoMonteiro/spanish.php>

**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/~poissonaga/>

**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>

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

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

Deadline for poster: March 31, 2011.

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

**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 22, 2011.

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

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