

These spaces are endowed with probability measures, one of the more regular cases being the law of Brownian motion. In this case Itô calculus provides the underlying techniques to manipulate irregular functionals of the paths and the corresponding infinite dimensional Analysis has developed intensively in the past recent decades giving rise to important results in Mathematics, but also applications outside the initial framework (e.g., Filtering and Control Theory, Financial Mathematics).

More recently, special attention has been given to the geometry of (curved) spaces. The goal of the workshop is to bring together various approaches to infinite dimensional Analysis.

The event will take place in Coimbra.

SPEAKERS GIVING A SERIES OF LECTURES:

Bernt Øksendal (Univ. of Oslo, Norway)

Jurgen Potthoff (Univ. of Mannheim, Germany)

OTHER SPEAKERS:

Thomas Deck (Univ. of Mannheim, Germany)

Hermann Matthies (Technical University Braunschweig, Germany)

Marta Sanz-Solé (Univ. of Barcelona, Spain)

Ali Suleyman Ustunel (Ec. Nat. Sup. Telecommunications Paris, France)

GRANTS:

Students can apply for participation grants. Applications can be sent to cruzeiro@cii.fc.ul.pt.

For information on this event, please visit the site

<http://gfm.cii.fc.ul.pt/Events/fbm2ida/>

CIM NEWS

CIM EVENTS FOR 2002

The CIM Scientific Committee, in a meeting held in Coimbra on March 17, approved the CIM scientific program for 2002.

THEMATIC TERM

The **Thematic Term** for 2002 will be dedicated to Mathematics and Biology. The application of mathematics to biology has had considerable effect on the development of new research areas at the interface of both sciences. The development of Mathematical Biology research requires interdisciplinary teams with great expertise on several scientific areas.

This Thematic Term has the objective of acting as a seed for the development and enlargement of mathematical research applied to biological systems centered on some expertise and areas that exist already within the teams working in Portugal.

The areas covered range from Ordinary Differenti-

al Equations; Dynamical Systems, Partial Differential Equations; Optimization; Numerical Analysis; Homogenization; Calculus of Variations; Nonlinear Continuum Mechanics; to Epidemiology; Population Dynamics; Molecular Geometry; Material Science; Bone Remodeling; Numerical Analysis and Design of Bone Prosthesis and Implants; Computer Simulation of the Mechanics of Soft Tissues and Muscles and Computer Simulation of the Heart and Circulatory System.

It is expected that a large number of graduate students and researchers not only from mathematics and biology, but also from engineering, physics and chemistry, may have the opportunity of exchanging their views and knowledge in order to establish a solid and fruitful collaboration in the near future.

SCHOOL AND WORKSHOP ON MATHEMATICAL AND
COMPUTATIONAL MODELING OF BIOLOGICAL
SYSTEMS

17-21 June 2002

Organizers:

João A. C. Martins, I. Superior Técnico - Lisbon

E. B. Pires, I. Superior Técnico - Lisbon

ADVANCED SCHOOL AND WORKSHOP ON BONE
MECHANICS - MATHEMATICAL AND MECHANICAL
MODELS FOR ANALYSIS AND SYNTHESIS

24-28 June 2002

Organizers:

Helder C. Rodrigues, I. Superior Técnico - Lisbon

José M. Guedes, I. Superior Técnico - Lisbon.

WORKSHOP ON MOLECULAR GEOMETRY
OPTIMIZATION

27-29 JUNE 2002

Organizer:

Fernando Nogueira, Univ. Coimbra

SUMMER SCHOOL ON MATHEMATICAL BIOLOGY

15-19 JULY 2002

Organizers:

Alessandro Margheri, Univ. Lisbon

Carlota Rebelo, Univ. Lisbon

Fabio Zanolin, Univ. Udine

Furthermore, the 2002 program will contain the
following event:

INTERNATIONAL CONFERENCE ON BOUNDED SYSTEMS
AND COMPLEXITY CLASSES

28-29 June 2002

Aims: To draw together people interested in bounded
formal systems related to computational complexity clas-
ses in order to discuss current work and assess directions
of research.

Organizer: Fernando Ferreira, Univ. Lisbon

CIM PUBLICATIONS

Since 1996, CIM has published the following monographs
and volumes of proceedings:

1. Pedro V. Silva, *Introdução à Teoria Combinatória de Semigrupos Inversos*, 1996.
2. João Tiago Mexia, *Introdução à Teoria Estatística do Risco*, 1996.
3. S. A. Robertson, *Three Talks on Convex Bodies*, 1997.
4. J. A. Green, *One Hundred Years of Group Representations*, 1997.
5. Paul A. Fuhrmann, *Linear Algebra and Control - Lecture Notes*, 1998.
6. Isabel N. Figueiredo (ed.), *Escola de Elementos Finitos e Aplicações*, 1998.
7. A. Ornelas, A. C. Barroso, J. Palhoto de Matos, J. Matias and P. Pedregal (ed.), *Mathematical Methods in Materials Science and Engineering - International Summer School*, 1999.
8. Grant Walker, *Some Aspects of the Action of Matrices over F_p on Polynomials*, 1998.
9. J. F. Queiró (ed.), *A Investigação Matemática em Portugal: Tendências, Organização e Perspectivas*, 1999.
10. Nazaré M. Lopes and E. Gonçalves (ed.), *On Non-parametric and Semiparametric Statistics*, 1999.

11. A. Sequeira (ed.), *International Summer School on Industrial Mathematics*, 1999.
12. A. Sequeira (ed.), *International Summer School on Computational Fluid Dynamics*, 1999.
13. A. Sequeira (ed.), *Navier-Stokes Equations and Related Topics (International Summer School)*, 1999.
14. L. Trabucho and J. F. Queiró (ed.), *O ensino da Matemática na universidade em Portugal e assuntos relacionados*, 2000.
15. M. Field, *Complex Dynamics in Symmetric Systems*, 2000.
16. M. Golubitsky and I. Stewart, *The Symmetry Perspective: From Equilibria to Chaos in Phase Space and Physical Space*, 2000.
17. L. N. Vicente (ed.), *Segundo Debate sobre a Investigação Matemática em Portugal*, 2001.

CIM ASSOCIATES

The current CIM Associate institutions are:

- Sociedade Portuguesa de Matemática
- Universidade de Coimbra
- Universidade do Porto
- Faculdade de Ciências da Universidade de Lisboa
- Universidade do Minho
- Universidade Nova de Lisboa
- Universidade de Aveiro
- Universidade dos Açores
- Universidade da Beira Interior
- Universidade de Évora
- Universidade de Trás-os-Montes e Alto Douro
- Cooperativa de Ensino Universidade Lusíada
- Universidade da Madeira
- Universidade do Algarve
- Centro de Matemática Aplicada do IST
- Centro de Investigação em Matemática e Aplicações da Universidade de Évora
- Centro de Álgebra da Universidade de Lisboa
- Centro de Matemática da Universidade de Coimbra
- Universidade de Macau
- Centro de Matemática da Universidade do Porto
- Centro de Estruturas Lineares e Combinatórias
- Instituto Superior de Economia e Gestão

CIM COOPERATION ACTIVITIES

CIM has a Committee to deal with cooperation activities in Mathematics with Portuguese-speaking countries.

The chairman of the Cooperation Committee is Prof. J. C. David Vieira (Aveiro).

CIM ON THE WWW

Complete information about CIM and its activities can be found at the site

This is mirrored at

<http://www.cim.pt>

<http://at.yorku.ca/cim.www/>

RESEARCH IN PAIRS AT CIM

CIM has facilities for research work in pairs and welcomes applications for their use for limited periods.

These facilities are located at Complexo do Observatório Astronómico in Coimbra and include:

- office space, computing facilities, and some secretarial support;
- access to the library of the Department of Mathematics of the University of Coimbra (30 minutes away by bus);

- lodging: a two room flat.

At least one of the researchers should be affiliated with an associate of CIM, or a participant in a CIM event.

Applicants should fill in the electronic application form

(http://www.cim.pt/cim.www/cim_app/application.htm)