

ESMTB Infoletter

November 2007



www.esmtb.org

Dear colleague

with this ESMTB Infoletter you receive information about conferences, workshops, schools and open positions. Please send relevant information to be included in the next ESMTB infoletter to info@esmtb.org.

Best regards, Andreas Deutsch
Dresden, 12th of November 2007

Conferences

15th International Conference MATHEMATICS. COMPUTING. EDUCATION at Joint Institute for Nuclear Research, Dubna, Russia

Date: 2008-01-28 to 2008-02-02

MATHEMATICS. COMPUTING. EDUCATION International Conference is organized by Lomonosov Moscow State University, Puschino Scientific Center (Puschino, Russia Academy of Science), Keldysh Institute for Applied Mathematics (Moscow, Russia Academy of Science), Joint Institute for Nuclear Research (Dubna), JINR Applied Scientific Research Center (Dubna), Dubna State University, the Interregional Public Organization Women in Science and Education and Moscow Society of Naturalists.

The Conference is held annually at the end of January in scientific centers nearby Moscow, Russia at Joint Institute for Nuclear Research, Dubna (even year event) and at Biology Research Center of Puschino (odd year event).

Mathematics is a well-known language that unites contemporary science. Most mathematical concepts have applicability far beyond the context they have originated from. The main objective of the Conference is to provide a platform for constructive dialogue between professionals in various fields of knowledge from pure mathematical theory to application of mathematical models and information technology in scientific research and education.

Conference agenda includes plenary lectures and concurrent sessions and workshops on the following topics: Mathematical Theories, Calculation Meth-

ods and Mathematical Modeling, Mathematical Models in Natural and Social Sciences, Natural and Social Science Education.

<http://www.mce.biophys.msu.ru/>
<mailto:mce@biophys.msu.ru>

International Conference on Systems Biology of Mammalian Cells (SBMC 2008) at Dresden, Germany

Date: 2008-05-22 to 2008-05-24

The competence network HepatoSys would like to draw your attention to the SBMC 2008 (May 22th - 24th) in Dresden, Germany. This conference will provide an overview of latest developments in cell signaling, proteomics, live cell imaging and dynamic pathway modeling that merge in the interdisciplinary field of Systems Biology in Mammalian Cells. The approach offers challenges and perspectives for life scientists, mathematicians, physicists, chemists, engineers and computer scientists.

In the sessions New theoretical approaches and cutting edge technologies, Signaling Networks, Self-organization and collective phenomena, Developmental Pattern Formation and Biomedicine, internationally renowned speakers will provide an overview and insights into the latest developments.

Junior scientists with a strong interest in quantitative biology, mathematical modeling and Systems Biology are invited to register and submit their abstracts until February 29th. Per session we will select at least one of the most exciting abstracts for oral presentations.

The social program will include activities such as a scenic boat trip on the Elbe river, an outdoor bar-

becue dinner and will leave plenty of opportunities for intensive and stimulating discussion.

<http://www.sbm08.de>
<mailto:ute.heisner@fdm.uni-freiburg.de>

The European Conference on Mathematical and Theoretical Biology 2008 at George Square complex of Edinburgh University, Edinburgh, Scotland

Date: 2008-06-30 to 2008-07-04

The European Society for Mathematical and Theoretical Biology (ESMTB) hosts a major international conference every three years and the next and 7th such conference will be held from 30th June - 4th July, 2008 in Edinburgh, in the George Square complex of Edinburgh University.

A minisymposium will consist of a 2 hour session dedicated to a single area of research. Each minisymposium may be composed of four 30-minute talks or three 40-minute talks. Applications to organise a minisymposium should be made via the conference web-site: <http://www.maths.dundee.ac.uk/ecmtb08> 2007 onwards.

The deadline for applications is 31st December 2007. All proposals will be refereed by members of the Scientific Committee and notification of acceptance for minisymposia applications will be made by 1st February 2008.

Registration for the meeting will be open on Monday 26th November 2007 and the call for abstracts of Contributed Papers and Posters will be made at this time also.

<http://www.maths.dundee.ac.uk/ecmtb08>
<mailto:ecmtb08@maths.dundee.ac.uk>

Workshops

Multiscale approaches in cell mechanics at Autrans, Grenoble, France

Date: 2008-01-07 to 2008-01-10

Participants should now register and provide the relevant information before December 5, 2007.

A limited number of participants will be accepted, and admission will be decided on a "first come-first serve" rule. Few places are still available if you are interested in giving a short presentation.

See website for further details.

<http://www-lsp.ujf-grenoble.fr/Muticell2008-res>
<mailto:Arnaud.Chauviere@nottingham.ac.uk>

Schools

Lipari International Summer School on Bioinformatics and Computational Biology at Lipari School, Lipari Island, Italy

Date: 2008-06-14 to 2008-06-21

The theme of the school, Biological Networks: Evolution, Interaction and Computation, falls within the areas of Bioinformatics & Systems Biology, and deals specifically with bioinformatics aspects of systems biology. There are four lecture series, each of three hours, and six tutorials, each of one hour. The lectures will cover fundamental aspects relating to the evolution of biomolecular systems and their various levels of interaction. Two series of lectures are devoted to molecular evolution in viruses and more complex genomes, while the other two are devoted to mathematical and computational methods needed to infer networks both for evolutionary and functional studies. We note that detection of similarity and comparison of biological sequences and structures remains a fundamental task; in particular, although methods based on sequence alignments alone seem no longer adequate. Moreover, the comparison of biological networks, in order to infer common features, is a particularly important, yet largely unexplored, computational topic. The tutorials will cover the most recent advances in computational methods to establish similarity among biological structures: sequences, protein structures, networks and graphs. Moreover, they will also highlight recent additional results on protein-protein and protein-DNA interactions. Thus they nicely complement the main lectures. As is clear from the enclosed bibliography, the selected themes have received attention in the scholarly literature that ranges from Nature to BMC Bioinformatics and Bioinformatics. In its entirety the planned summer school will allow young researchers interested in bioinformatics and systems biology to be exposed to cutting edge

results in the increasingly important area of network inference and analysis in biology.

<http://lipari.cs.unict.it/LipariSchool/Bio/>

<mailto:school@dm.unict.it>

Open Positions

Two 4-year PhD or 2-year post-doc positions in Evolutionary and Theoretical Community Ecology at Community and Conservation Ecology Group (Dr. Rampal S. Etienne), Center of Evolutionary and Ecologi

Deadline for applications: 2007-12-31

The positions are part of an NWO-VIDI grant awarded to Dr. Rampal Etienne. More detailed information on subprojects is available on request.

We offer: Two PhD scholarships for a period of 4 years. Within this period, the work should lead to a PhD thesis and a PhD defense at the University of Groningen. The gross amount of the scholarship is EUR 1422 per month. Interested postdocs may also apply to be appointed for a period up to 2 years.

We look for: Quantitative evolutionary biologists/(community) ecologists, or a biology-minded mathematicians or physicists.

We require: Expertise in theoretical/mathematical modelling and/or data analysis. Excellent communication skills with good command of oral and written English.

We encourage: Exciting ideas within the general framework of the project. Although the emphasis of the research will be on theoretical work, empirical (field or lab) work is also possible, if strengthening the project.

Please contact: Dr. Rampal S. Etienne

<http://www.rug.nl>

[Download PDF here](#)

Mathematical Modelling of Cellular Interactions at Interdisciplinary Research Institute, Institut de Biologie de Lille, France

The Interdisciplinary Research Institute (IRI) is recruiting a Group Leader to head a Research Group on the Mathematical Modelling of Cellular Interactions as occurring either inside cells such as in gene regulation, signal transduction and chromatin dynamics, or between cells as in multicellular dynamics or morphogenesis.

The Group Leader should be a young mathematician (f/m) with a deep research interest in modelling issues in the new field of Systems Biology particularly with an acknowledged expertise in reaction-diffusion equations, PDE methods in imaging or methods of spatial statistics.

The applicants must show an outstanding research potential, normally including major contributions beyond the doctoral thesis. The position is offered for a period of up to 3 years; the appointment will be commensurate with experience. The position is free of teaching duties and is accompanied by a research budget, including a post-doctoral fellowship.

The appointee will be located in the IRI laboratory among colleagues from different scientific disciplines (biology, chemistry, physics, computer science). The newly established institute provides a rich environment for interdisciplinary research in Systems Biology.

The research group is also asked to foster the interaction between the IRI and the existing research teams in Mathematics at the University of Lille (Laboratoire Paul Painlevé and INRIA Futurs Lille).

Applicants should send their curriculum vitae, statement of research, and contact information for three references to:

Laurence Labaeye, Interdisciplinary Research Institute @ Institut de Biologie de Lille, 1, rue du Prof. Calmette, 59021 Lille Cedex, France (laurence.labaeye@ibl.fr)

Review of applications will continue until suitable candidates are hired.