Conference on Mathematical Modeling and Control of Communicable Diseases

Rio de Janeiro, Brazil, January 11-14, 2016

We apologize if you received multiple copies of this announcement.
Please feel free to distribute it to those who might be interested.

The **Conference on Mathematical Modeling and Control of Communicable Diseases** will be held from Monday through Thursday, January 11-14, 2016 at Fundação Getulio Vargas (FGV), Rio de Janeiro, Brazil. The Conference will take place in the emblematic building of FGV created by the architect Oscar Niemeyer in Praia de Botafogo, on the shore of Guanabara Bay, at the foot of Sugar Loaf Mountain. Mini-courses will be held on Monday, January 11, talks and poster presentation will take place from Tuesday 12 to Thursday 14. The conference will followed by satellite events on Friday, January 15, including the annual meeting of the Brazilian network for modeling of Dengue fever.

The website of the conference is http://www.fgv.br/math-epidemics/. This site will be updated regularly with further information.

The contact email address is emap.eventos@fgv.br

See the list of confirmed speakers, mini courses, important dates and committees below. Also more information about the conference structure and scopes are given at the end of the message.

Invited Speakers
Plenaries (confirmed):
- Nicolas Bacaër, IRD, Bondy e UPMC, Paris, France
- Nick Britton, University of Bath, UK
- Bernard Cazelles, Ecole Normale Supérieure, Paris, France
- Cláudia Codeço, Fiocruz, Brazil
- Vittoria Colizza, INSERM e UPMC, Paris, France, e ISI Fundation, Turin, Italy
- Christl Donnelly, Imperial College of London, UK

- Aaron King, Michigan University, USA
- Eduardo Massad, USP, São Paulo, Brazil
- Mercedes Pascual, University of Chicago, USA
- Michael Turelli, University of California, Davis, USA

Mini Courses (confirmed):
- Patrick De Leenheer, Oregon State University, USA
- Karl Sigmund, University of Vienna, Austria
- Michael Li, University of Alberta, Canada

Important Dates:
Abstract submission deadline: August 24th, 2015
Author notification deadline: October 9th, 2015
Final manuscripts due: November 9th, 2015
Author registration deadline: December 10th, 2015
Earlybird registration deadline: December 10th, 2015
Mini-courses: January 11th, 2016
Conference: January 12th-14th, 2016
Satellite events: January 15th, 2016

Organizers:
Chairs:
Pierre-Alexandre Bliman, EMAp/FGV, Brazil & Inria, France (organization chair)
Jorge Zubelli, IMPA, Brazil (scientific chair)

Scientific committee:
• Nick Britton, Univ. of Bath, UK
• Flávio Coelho, FGV, Brazil
• Eduardo Massad, USP, Brazil
• Benoît Perthame, Inria, France
• Gauthier Sallet, Inria, France
• Max Souza, UFF, Brazil
• Cláudio Struchiner, Fiocruz, Brazil
• Michael Turelli, Davis Univ., USA
• Jorge Zubelli, Chair, IMPA, Brazil

Organizing committee:
• Maria Soledad Aronna, EMAp/FGV, Brazil
• Pierre-Alexandre Bliman, EMAp/FGV, Brazil & Inria, France
• Sabrina Camargo, EMAp/FGV, Brazil
• Flávio Codeço Coelho, EMAp/FGV, Brazil
• Daniel Antunes Maciel Villela, Fiocruz, Brazil
• Moacyr Alvim Horta Barbosa da Silva, EMAp/FGV, Brazil
• Max Souza, UFF, Brazil

Further information
Characterized by its boldness and pioneering spirit, FGV is a world renowned center for quality education dedicated to promoting Brazil's economic and social development, ranked one of the Top 25 Think Tanks and Top 100 higher education institutions in the world. IMPA, the federal research and educational institution widely considered to be the foremost

in Brazil in the area of mathematics (through LAMCA, the Laboratory of Analysis and Modeling in the Applied Sciences); Fiocruz, the most prominent institution of science and technology in health in Latin America; Universidade Federal Fluminense, one of the four federally funded public universities of the State of Rio de Janeiro; and Inria, the French research institute dedicated to computational sciences, co-organize the meeting.

The objective of the organizers is to bring together researchers and students working on the modeling of human transmissible diseases, considered in the most extensive sense. Interested academics from a large spectrum of applied mathematics are expected, with interest ranging from mathematical epidemiology to statistics, from dynamical systems to control theory, at the borders of biology (including entomology and immunology), ecology, or even economy or climatology. The scope of the event is to provide comprehensive vision of the questions and methods raised by the mathematical modeling of transmissible diseases, from theory to application and back: model analysis, experimental data analysis, qualitative behaviors, control strategies, game theory are among the different approaches that are most welcome. One may forecast a substantial interest for the modeling of endemic tropical diseases (such as dengue fever, yellow fever, chikungunya, malaria, leishmaniasis…) and of major global epidemics (e.g. influenza, Ebola fever, HIV…), but the workshop is open to studies on all types of transmissible human pathologies. The topics include, but are not limited to, the following:
1.   Spatial and seasonal aspects of epidemics
2.   Control methods
3.   Statistical modeling and parameter estimation methods
4.   Qualitative behaviors and general tools from dynamical system theory
5.   Evolutionary game theory, phylogenetics
6.   Modeling in epidemiology and neighboring fields: sociology, immunology, environment and ecology, climatology, economy, public health…

The Conference will feature contributed papers for oral or poster sessions, including invited and tutorial. Apart from providing a forum for the presentation of new results, the workshop aims at offering a strong tutorial content. It will host ten plenary talks, delivered by some of the best specialists worldly, and will be preceded by three mini-courses devoted to more focused topics. Undergraduate students, as well as PhD students, from Brazil or abroad, are strongly encouraged to participate and will receive attendance certificate. Free entrances to the social dinner will be awarded to the authors of the Best Student Poster and to the Best Student Paper.