

CENTRE DE



RECERCA



MATEMÀTICA



Advanced Course on Mathematical Biology: Modeling and Differential Equations

Dates

February 2 to 6, 2009

PlaceCentre de Recerca Matemàtica
Campus de la Universitat Autònoma de Barcelona, Bellaterra**Goals**

Differential equations appear naturally in many mathematical biology models since they are the basic language of expression of the underlying mechanisms. Ordinary differential systems, either deterministic or stochastic, usually form the bricks of the modeling from which more complicated phenomena can be analysed by means of partial differential equations. The qualitative properties obtained from the analytical and numerical study of these models can be a great deal of information for the modeler in order to assess validity of the models and a way of improving the modeling.

This first series of courses of the thematic program wants to explore particular and specific mathematical models in biology, mainly in the areas of adaptive dynamics, cell movement by chemotaxis, pattern formation, tumour growth modeling and population dynamics.

Speakers

Odo Diekmann, Universiteit Utrecht, Netherlands

Physiologically structured population models and delay equations

Masayasu Mimura, Meiji University, Japan

Pattern formation and reaction-diffusion systems

Benoît Perthame, ENS-Paris 6, France

Selection, mutations, evolution: an asymptotic analysis

Luigi Preziosi, Politecnico di Torino, Italy

Modeling tumour growth

Angela Stevens, Universität Heidelberg, Germany

Mathematical models for structure formation in interacting cell systems

Coordinators

Àngel Calsina, Universitat Autònoma de Barcelona

José A. Carrillo, Universitat Autònoma de Barcelona

Antoni Guillamon, Universitat Politècnica de Catalunya

**Registration and
Payment**

Registration fee to the Advanced Course: 250 Euros

Registration to both the Conference and the Advanced Course: 400 Euros

Deadline for registration and payment: December 31, 2008

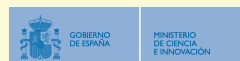
Grants

The CRM offers a limited number of grants covering registration and accommodation addressed to young researchers. The deadline for application is November 30, 2008.

Information

acmodeling@crm.cat

www.crm.cat/acmodeling



Apartat 50, E-08193 Bellaterra, Spain
Tel.: +34 935811081 - Fax: +34 935812202
crm@crm.cat