

Modelling Biological Evolution 2015:

Linking Mathematical Theories with Empirical Realities

The conference will focus on various aspects of modelling evolution, adaptation and acclimation in different biological systems ranging from macromolecules and cells to processes in sociobiology, including the evolution of human culture and behaviour. Various methods and modelling techniques will be represented including (but not restricted to) general aspects of game theory, adaptive dynamics, optimization, reinforcement learning, model reduction, individual based models as well as their combinations. An important part of the conference will be comparison of the results obtained based on different mathematical techniques to stimulate further advances in modelling biological evolution. The conference is also expected to be an open forum for communication (and probably, hot debates!) between empirical evolutionary biologists and mathematicians with the main goal of enhancing interdisciplinary approaches and stimulating further advances in understanding biological evolution.

Main Organiser: Andrew Morozov (Leicester, UK)

Advisory Scientific Committee: Alexander Gorban (Leicester, UK), Ivana Gudelj (Exeter, UK), Vincent Jansen (RHUL, UK), Kalle Parvinen (Turku, Finland), Minus van Baalen (Paris, France), Andy White (Heriot-Watt, UK)

Plenary Speakers:

Samuel Alizon (Montpellier, France)
Nick Britton (Bath, UK)
Sergey Gavrilets (Knoxville, USA)
Alexander Gorban (Leicester, UK)
Ivana Gudelj (Exeter, UK)
Rebecca Hoyle (Southampton, UK)
Yoh Iwasa (Kyushu, Japan)
John McNamara (Bristol, UK)
Arne Traulsen (Max-Planck-Institute, Ploen, Germany)
Katerina Stankova (Maastricht, the Netherlands)
in memory of Professor Maurice Sabelis

Local Organising Committee:

Matthew Adamson
Scott Balchin
Oksana Gonchar
Masha Jankovic
Yadigar Sekerci



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