

# Modelling Nature (MNat)

GRANADA (SPAIN) SEPTEMBER 17-28, 2018



This school arose from the need of PhD students of acquiring an interdisciplinary knowledge that allows them to deal with scientific problems of current interest and social relevance that combine the points of view of mathematical modeling, complexity, ecological networks, bioinformatics, physics of new materials, developmental biology, synthetic biology, and tumour dynamics. The purpose is to give an added value to each specific field, placing it in the most up-to-date cutting-edge research. In this proposal of the International Doctoral School, professors from different PhD programs are included in both the

- Doctoral School of Health Sciences
- Doctoral School of Science, Technology and Engineering

Specifically, professors of the following UGR PhD programs

- Biomedicine
- Fundamental and Systems Biology
- Physics and Space Sciences
- Physics and Mathematics (Fis&Mat)
- Civil Engineering

Along with international specialists in these fields, form the teaching team of this PhD school. Therefore, the area of interest is broad and socially as well as scientifically relevant. It is framed in a well-reputed international context, where this type of multidisciplinary schools has experienced a growth boom. In this direction, the main objective is to incorporate this line of multidisciplinary training to the UGR Doctoral School.

The school is centred on six sessions built around six respective multidisciplinary topics described below. Each session consists of two courses of about 3-5 hours plus some one-hour seminars. During the school, we will develop a workshop of young researchers.

## The themes of the PhD School are

- Mathematical Models and Methods in Life Sciences
- Cell Communication and Tumor Growth
- Modeling Bio-Nanotechnology, Nanoparticles, and Synthetic Biology
- Complex Adaptive Systems at Multiple Scales in Evolutionary and Global Ecology
- Mathematical Models of Vision
- Scientific Effective Communication. Creativity in Science
- Workshop of Young Researchers

## Grants

There are 15 grants (registration and/or accommodation for up to 13 days) for students interested in attending the MNat PhD School.

Deadline to apply for financial support: July 15th, 2018.

- Website

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