

MathMods

Mathematical Models in Life
and Social Sciences

MathNanoSci

When Mathematics
Meets Nanosciences



Two Intensive Programmes funded by
the European Commission under the
Erasmus Programme and addressed to
both MSc and PhD students

L'Aquila (Italy)
7-20 June 2009

Aims

MathMods Intensive Programme aims to provide a solid training background in mathematical modelling viewed as an interdisciplinary subject with relation to sociology, economics, life and biomedical sciences. The proposed activities cover a wide range of modelling methodologies (both classical and more innovative ones), complemented by theoretical mathematical tools, numerics and simulations.

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Scholarships are provided for students
belonging to the partner universities

Aims

Mathematics and simulations are enormously stimulated by the challenges of nanoscale modelling. A demand for applied mathematics in this field is indeed very likely to increase in the near future. A number of challenging theoretical questions arise from this context, where mathematics is designed to tackle problems defined by nanoscientists and, on the other hand, the establishment of new model hierarchies are strongly needed. MathNanoSci Intensive Programme aims to respond to all these needs. With this object in view, the programme will provide both classical and newly developed expertise in applied mathematics - from a theoretical as well as numerical point of view - as regards application to nanosciences. In addition, students will be exposed to a selection of contexts arising from applications such as semiconductor devices and applications of new mathematical tools to the modelling of nanostructures (e.g. nanowires).

Organizing Committee

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