

Biomat

Universidad de Granada 1-5 June 2009

Mathematics and Life Sciences: Biology & Mechanics

FISYMAT Postgraduate Program in Physics and Mathematics
<http://www.ugr.es/~fisymat>

Directors:
Miguel A. Herrero (U. Complutense)
Juan Soler (U. Granada)

Programme

Courses

Computational Mechanobiology of Hard Tissue; applications to Implant Design and Tissue Engineering

Manuel Doblaré, M. Ángeles Pérez (Universidad de Zaragoza)

Bio-fluids, Numerical Simulation: Blood-Vessel Interaction

Miguel Fernández (INRIA, París)

Seminars

Structure, dynamics and efficiency of tumour vascular networks

Tomás Alarcón (Imperial College, London)

ISTER (Immune System Tumor Efficiency Ratio) a new index in radiotherapy

Quantitative measure of flux in Circulatory Mechanical Assistance

José Carlos Antoranz (UNED, Madrid)

Multiscale modelling of tumor growth

Gabriel Fernández Calvo (Universidad de Castilla-La-Mancha)

The search for earliest signs of life on Earth

Juan M. García Ruiz (CSIC, Granada)

Mathematical models of wound healing events

Etelvina Javierre (Universidad de Zaragoza)

New insights in the modeling of neural systems: bimodal resonances, criticality and brain development

Joaquín Torres (Universidad de Granada)

Sponsors:

Ministerio de Ciencia e Innovación (Spain)

Junta de Andalucía, *Biomat: Modelos matemáticos en vías de señalización originados en dinámica tumoral, sistemas complejos multicelulares, neurociencia y coagulación sanguínea.*
Project FQM-4267-E

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Information and grants:
<http://www.ugr.es/~kinetic/biomat/>