

# First Porto Meeting on Theory and Experiment in Nonlinear Physics

7-9 of July 2010, Porto, Portugal

The goal of this meeting is to survey recent advances on a wide range of topics of current interest in nonlinear physics and mathematics including wide range of applications such as nonlinear optics, Bose-Einstein condensates, Biology, etc. The meeting will provide a forum for theoreticians and experimentalists to present and discuss their latest results. We would like to stimulate knowledge exchange, and to identify new marginal problems. We also hope that this meeting will be an excellent opportunity for young researchers to present their recent results and establish new collaborations with different groups in Portugal and abroad.



- Physics of Bose-Einstein condensation
- Solitons and wave interactions in optics
- Nonlinear optics and optical diagnostics of nanostructures
- Nonlinear hydrodynamics and fluid dynamics
- Nonlinear phenomenon in biological and social systems
- Mathematical models for nonlinear dynamical systems
- Other related topics

## Invited speakers:

**Mario Salerno** (University of Salerno, Italy)

*Bose-Einstein condensates in deep optical lattices subjected to strong nonlinearity management*

**Majid Taki** (University of Lille, France)

*Observation of extreme temporal events in a photonic crystal fiber: Optical Rogue Waves*

**Victor M. Pérez Garcia** (IMACI, Spain)

*Modelling cancer using differential equations: A physical and mathematical trip into medical problems*

**Leonor Cruzeiro** (University of Algarve, Portugal)

*The VES hypothesis and protein function*

**Fatkhulla Abdullaev** (Physical-Technical Institute, Uzbekistan)

*Dissipative periodic waves, solitons and breathers of the nonlinear Schrodinger equation with complex potentials*



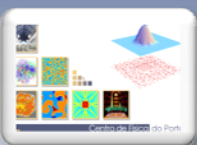
Local organizing committee:

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Registration deadline: **15 of May 2010**

## Sponsors



**FCT** Fundação para a Ciência e a Tecnologia  
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