

Presentation

NoLineal 2016 (Seville, 7-10th June, 2016) is the 10th in a series of conferences previously held in Ávila (1997), Almagro (2000), Cuenca (2002), Toledo (2004), Ciudad Real (2007), Barcelona (2008), Cartagena (2010), Zaragoza (2012), and Badajoz (2014).

The aim of this conference is to offer senior and young researchers of different areas, such as Physics, Mathematics, Biology, Economics, Social Sciences, etc, the possibility to share their latest results in this interdisciplinary meeting.

This international conference is open to researchers from all around the world. All lectures will be given by leading scientists. Participants are strongly encouraged to present and discuss their own research, especially during oral and poster sessions.

The congress will be held in memoriam of Prof. Antonio Castellanos Mata, Full Professor of Electromagnetism at the University of Seville, and Director of the group of Electrohydrodynamics and Cohesive Granular Media, who was member of the Scientific Committee and passed away during the organization of the event. At the meeting we will commemorate his life and work.

Local Organizing Committee

- Faustino Palmero (general chair)
- Juan F.R. Archilla
- Victoriano Carmona Centeno
- Jesús Casado Pascual
- Jesús Cuevas Maraver
- Fernando Fernández Sánchez
- Elisabeth García Medina
- María del Carmen Lemos Fernández
- Niurka R. Quintero
- Bernardo Sánchez Rey

Scientific Committee

- Lluís Alsedà, Universitat Autònoma de Barcelona (Spain)
- Francisco Balibrea Gallego, Universidad de Murcia (Spain)
- Roberto Barrio, Universidad de Zaragoza (Spain)
- Ricardo Carretero González, San Diego State University (USA)
- Ricardo Chacón García, Universidad de Extremadura (Spain)
- Antonio Córdoba Zurita, Universidad de Sevilla (Spain)
- Leonor Cruzeiro, Universidade do Algarve (Portugal)
- Emilio Freire Macías, Universidad de Sevilla (Spain)
- Panayotis G. Kevrekidis, University of Massachusetts (USA)
- Víctor Pérez García, Universidad de Castilla-La Mancha (Spain)
- Francisco Romero Romero, Universidad de Sevilla (Spain)
- Albert J. Sievers, University of Cornell (USA)
- Pedro J. Torres Villarroya, Universidad de Granada (Spain)

Layout of the Book of Abstracts

– Contributors	vii
– Table of Contents	ix
– In Memoriam: Antonio Castellanos Mata	xiii
– Plenary Speakers	1
– Oral communications	
(1) Theory and Computation	15
(2) Biology, Fluids, Cosmology and the Environment	35
(3) Optics and Bose Einstein Condensates	55
(4) Crystals, Metamaterials and other Condensed Matter	65
– Posters	83
– Subject Index	97
– Schedule	103