

São Paulo International Schools on Theoretical Physics

Nonlinear Optics and Nanophotonics

November 25 - December 6, 2013

Instituto de Física Teórica - UNESP - São Paulo, Brazil

This school on Nonlinear Optics and Nanophotonics will cover the physics of nonlinear optical systems including photonic crystals and photonic lattices; Nonlinear optics at the nanoscale; Active optical media and laser dynamics; Nonlinear effects in optical communication systems; Metamaterials; Complex dynamics of quantum optical systems.

The school will end with a one day Workshop and precede the 6th Rio de la Plata Workshop on Laser Dynamics and Nonlinear Photonics, which will be held in Montevideo, Uruguay from December 9-12, 2013 (<http://www.fisica.edu.uy/~cris/workshop.htm>).

Lecturers:

Thorsten Ackemann: *Laser solitons, VCSEL, patterns and dynamics*
University of Strathclyde, Scotland, UK

Cid de Araujo: *Nonlinear optical processes in condensed matter*
Universidade Federal de Pernambuco, Brazil

Marcel Clerc: *Spatiotemporal chaotic localized states in optics*
Universidad de Chile

Alexander Gaeta: *Nonlinear interactions in optical waveguides*
Cornell University, USA

Dan Gauthier: *Tailoring the group velocity and group velocity dispersion*
Duke University, USA

Michal Lipson: *Nanophotonic structures for extreme nonlinearities on-chip*
Cornell University, USA

Mario Molina: *Discrete photonics in waveguide arrays*
Universidad de Chile

Miguel C. Soriano: *Dynamics and applications of delay-coupled semiconductor lasers*
Universitat Illes Balears, Spain

Sergei Turitsyn: *Nonlinear effects and technologies in optical communication systems*
Aston University, UK

Organizers:

Cristina Masoller (Universitat Politècnica de Catalunya, Spain), Hilda A. Cerdeira (ICTP-UNESP, Brazil) and Yuri Kivshar (Australian National University)

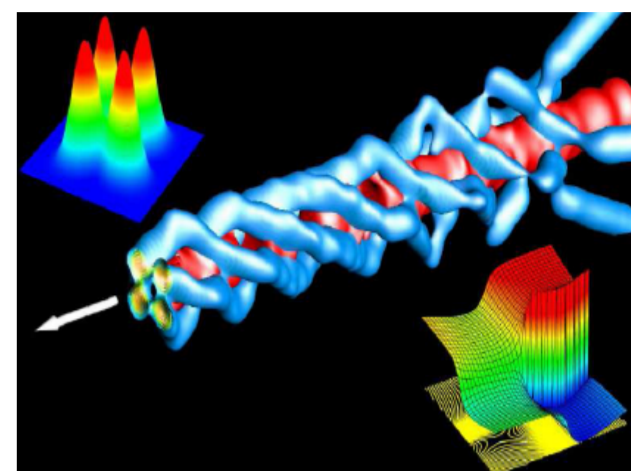
This school is part of the Topics in Nonlinear Science: Fundamentals and Applications

The online application form and more information can be found at:

www.ictp-saifr.org/nonlinear

There is no registration fee. Some funds are available for local and travel support of the participants.

The application deadline is **September 25, 2013.**



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