TOPICS OF INTEREST INCLUDE:

Lasers: General laser theory; Semiconductor lasers; Microcavity and microdisk lasers; Photonic crystal lasers; Laser design and operation; Dynamical laser instabilities; Noisy laser behavior; Spatial pattern formation; Laser applications; Laser spectroscopy.

Nonlinear optics: Phase conjugation; Beam trapping, self-focusing and defocusing; Self-phase modulation; Optical frequency converters; Optical bistability, multistability, and switching; Dynamics of nonlinear optical systems; Optical instabilities, optical chaos and complexity; Optical spatio–temporal dynamics; solitons; nonlinear guided waves and waveguides.

Optical materials and nanophotonics: Nonlinear optical crystals; Photorefractive and semiconductor materials; Photonic bandgap materials; metamaterials and plasmonics; Nonlinear behavior in nanophotonics.

The Workshop will have invited talks, contributed talks and a poster session. The purpose of the Workshop is to keep the scientific community working on laser dynamics and nonlinear photonics, updated with the most recent developments and tendencies in the area. We hope that the Workshop will provide the opportunity to interchange ideas in a relaxed environment, contributing in this form to the possible development of new scientific collaborations. Emphasis will be put in the participation of Latin-America young scientists.

The Workshop will be held in Colonia del Sacramento, Uruguay. Founded in 1680 by the Portuguese, it was declared World Heritage City by UNESCO. Located on the north bank of the Rio de la Plata estuary, upriver from Montevideo, Colonia del Sacramento is situated at the tip of a peninsula. The historic quarter of the city, with the towers of the Church of the Holy Sacrament and the lighthouse, constitutes a remarkable testimony, in its plan and its monuments, to the character and the objectives of a European colonial city at the end of the 17th century. Temperatures during December range from 25 to 30 degrees Celsius, with mostly sunny days.

DEADLINES Registration and Abstract submission October 14, 2011

SCIENTIFIC ORGANIZERS:
Cristina Masoller (UPC, Spain, cristina.masoller@gmail.com, cristina.masoller@upc.edu)
Igal Brener (Sandia National Laboratories, USA, ibrener@sandia.gov)
Alejandro Giacomotti, LPN CNRS, France, Alejandro.Giacomotti@lpn.cnrs.fr

For more information please visit the website (http://www.fisica.edu.uy/~cris/workshop11.htm) or contact the organizers.