

FOURTH "RIO DE LA PLATA" WORKSHOP ON LASER DYNAMICS AND NONLINEAR PHOTONICS

Piriapolis, Uruguay
December 8 to 11, 2009.



<http://www.fisica.edu.uy/~cris/workshop09.htm>

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 poster sessions. 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 Piriapolis, at the Argentino Hotel Casino & Resort (<http://www.argentinohotel.com>), a traditional hotel that has been recently renovated and has thermal marine swimming pools. Piriapolis is a peaceful and charming coastal resort, with a wide range of white sand beaches and a wonderful shore with european style. Piriapolis is located 100 km east of Montevideo (nearly an hour by car), 30 km west from Punta del Este, and is a city that offers an unbeatable conjunction of sea, nature, peace and good services. Temperatures during December range from 25 to 30 degrees Celsius, with mostly sunny days.

DEADLINES

Registration and Abstract submission October 9, 2009
Acceptance October 23, 2009

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A topical issue, in the form of a focus section, dedicated to "Laser Dynamics and Nonlinear Photonics", is in preparation in The *European Physical Journal D* (EPJD), a journal which covers disciplines relevant to Atomic, Molecular, Optical and Plasma Physics. Full-length papers (no page quota imposed) should be submitted not later than the end of November 2009 via the usual submission internet site of EPJD.

For more information please visit the website (<http://www.fisica.edu.uy/~cris/workshop09.htm>) or contact the organizers.