

CALL FOR PAPERS: DYNAMICS DAYS SOUTH AMERICA 2010



<http://www.lac.inpe.br/ddays/>

July 26-30, 2010

São José dos Campos – São Paulo – Brazil

Receiving submissions (contributive talks, posters, minisymposium proposals) up to April, 15th!

INVITATION

The Dynamics Days, founded in 1980, is the longest standing and most respected international series of meetings devoted to the field of dynamics and nonlinearity. Traditionally it has been bringing together researchers from a wide range of backgrounds including physics, biology, engineering, chemistry and mathematics for interdisciplinary research in nonlinear science. The Organizing Committee of this *Dynamics Days South America 2010* welcomes you to participate of this outstanding event to be held in São José dos Campos, SP, Brazil, from 26 to 30 July, 2010.

OBJECTIVE

The aim of this meeting is to bring together for the first time in South America researchers from a wide range of backgrounds who share a common interest in the theory and applications of nonlinear dynamics. As so, researchers with background in physics, biology, engineering, chemistry and mathematics will have a forum to promote regional as well as international scientific and technological exchanges and collaborations specially, but not exclusively, on problems that are specially relevant for the development of science and technology in the South America region.

Special focus will be put on students, as they will have the opportunity to be in contact with important, challenge and relevant research issues as well as the proper methodology that should be used to tackle specific problems.

PROGRAM STRUCTURE AND TECHNICAL TOPICS

The conference will be structured in plenary invited talks, minisymposiums, contributed talks and poster sessions. It will cover a broad range of topics, including:

- Applications in Engineering and Nanoscience
- Applications of Dynamical Systems in Medicine and Health Sciences
- Applications of Nonlinear Sciences
- Astrodynamics
- Bifurcation theory and analysis
- Celestial Mechanics
- Chaos in Hamiltonian Systems
- Chaotic Dynamics
- Climate Dynamics
- Collective Phenomena
- Communication with Chaos
- Complex Networks
- Complex dynamics in chemical systems
- Control of Chaos and applications
- DNA Translocation Dynamics
- Dynamics of Biosystems
- Dynamics of Granular Materials
- Fluid Dynamics, Plasma and Turbulence
- Formation and Dynamics of Patterns
- Neuronal Dynamics
- Optoelectronic and Granular Matter
- Population Dynamics and Epidemiology
- Self-organization
- Stochastic Dynamics
- Synchronization
- Time series analysis

IMPORTANT DATES

- Paper submission due April 15, 2010
- Notification of acceptance May 15, 2010
- Registration June 15, 2010

ABSTRACT SUBMISSION

Contributed papers for oral or poster presentations are invited for the technical sessions. Papers will be selected on the basis of the content of the abstract. With one or two A4 page in length, the abstract should be a self-contained description of the contribution of the paper and why it would be of interest to conference attendees. Abstracts will be reviewed by the *International Advisory Committee*. The authors are requested to indicate their preferred type of presentation (oral: 15 min plus 5 min of discussion, or poster), and the corresponding technical topic. Notification of acceptance will be sent by e-mail by June 15, 2010.

CONFERENCE LANGUAGE

All abstracts and manuscripts must be submitted in English. Invited and contributed talks, as the poster presentations, will be given in English, which is the official Conference language.

WORKSHOP PROCEEDINGS AND JOURNAL SPECIAL ISSUE

Through a peer-reviewed process, as customary for original papers, the Proceedings of the South America Dynamics Days 2010 will be published. Invited papers plus a selection of contributed papers will be published in an international high impact journal. The length of papers is 12 (twelve) printed pages for invited papers and 8 (eight) printed pages for regular contributed papers.

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- Philip Morrison (University of Texas – USA)
- Ricardo Egydio (Universidade Estadual Paulista "Julio de Mesquita" – Brazil)
- Riccardo Meucci (Istituto Nazionale di Ottica Applicata –Italy)
- Sudeshna Sinh (The Institute of Mathematical Sciences – India)
- Tatiana Michtchenko (Universidade de São Paulo -Brazil)
- Ying-Cheng Lai (Arizona State University –USA)

VENUE

The Dynamics Days South America 2010 will take place at the Conference Center of INPE and will be held on July 26-30, 2010. Beautifully located in the valley of the Paraíba do Sul River, São José dos Campos is a major city in the state of São Paulo, Brazil, and it is the leading city in aerospace technology in South America. It lies about 100 km East from São Paulo, 50 minutes travel time away from the São Paulo- Guarulhos International Airport, and is cut by Via Dutra, the highway which connects Rio de Janeiro (340 km Northeast) and São Paulo, the two most important Brazilian cities. The National Institute for Space Research (INPE) coordinates intensive research and development in areas such as space sciences, space technologies, Earth observation and meteorology.