



## School on Nonlinear Differential Equations

9 – 27 October 2006  
ICTP, Miramare - Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP) is organizing a **School on Nonlinear Differential Equations** from 9 to 27 October 2006. It will be directed by A. Ambrosetti (SISSA, Trieste, Italy), C.E. Chidume (ICTP, Trieste, Italy) and D. De Figueiredo (Universidade de Campinas, Brazil).

The School is addressed to Ph.D students and people who are currently engaged in research in nonlinear problems.

During the **two first weeks**, 10-hour courses on each of the following topics will be delivered:

- Calculus of Variations and Optimization
- Topological methods and Differential Equations
- Critical Point Theory and Nonlinear variational problems
- Control Theory

These courses will be of an introductory nature and are intended to provide the participants with a common background.

The lecturers are outstanding experts who are known world-wide as leaders in the research on the above fields.

In the **third-week**, there will be the following mini-courses:

- Hamiltonian Differential Equations
- Perturbation methods in Critical Points and NLS
- Nonlinear Partial Differential Equations
- Selected topics on Optimization
- Selected Topics on Control

The invited speakers for these courses will include some of the best experts in the field as well as brilliant young researchers. They will provide the participants with some of the most recent and most interesting perspectives for future research.

Mathematicians from all countries that are members of the United Nations, UNESCO or IAEA may attend the activity. Although the main purpose of the ICTP is to help researchers from developing nations through a programme of training activities within a framework of international cooperation, scientists from developed countries are also encouraged to attend. As the activity will be conducted in English, participants must have a good working knowledge of that language. Participants should have completed some years of study after a first degree.

As a rule, travel and subsistence expenses of the participants are borne by the home institution. However, limited funds are available for some participants from, and working in, developing countries, to be selected by the organizers. Such financial support is available only for those who attend the entire activity. Every effort should be made by candidates to secure support for their fare (or at least half of their fare) from their home country. There is no registration fee for participation in the activity.

**The closing date for submitting requests for participation is 30 April 2006.**

The decision of the organizers will be communicated to all candidates as soon as possible thereafter. The **Application Form** for the School can be found on the Web server of ICTP at: [http://cdsagenda5.ictp.trieste.it/full\\_display.php?smr=0&ida=a05229](http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a05229). It should be completed, signed and mailed to:

The Abdus Salam International Centre for Theoretical Physics  
**School on Nonlinear Differential Equations**  
(smr1777 c/o Ms. Mabilo Koutou)  
Strada Costiera 11  
I-34014 Trieste, Italy

*If sending an application by e-mail please save and send file attachments in PDF*

Telephone: +39 - 040 - 2240455    Telefax: +39 - 040 - 2240490    e-mail: [smr1777@ictp.it](mailto:smr1777@ictp.it)

ICTP Home Page: <http://www.ictp.it/>

Trieste, December 2005

### ORGANIZERS

A. Ambrosetti (SISSA, Italy)

C.E. Chidume (ICTP, Italy)

D. De Figueiredo (Campinas, Brazil)

### LECTURERS

#### (Main-Courses)

A. Agrachev (Sissa, Italy)

D. Arcoya (Granada, Spain)

V. Coti Zelati (Napoli, Italy)

D. De Figueiredo (Campinas, Brazil)

M.T. Niane (Saint-Louis, Senegal)

R. Ortega (Granada, Spain)

A. Ponce (Tours, France)

L. Rosier (Nancy, France)

#### (Mini-Courses)

A. Ambrosetti (Sissa, Italy)

T. Bartsch (Giessen, Germany)

M. Berti (Napoli, Italy)

P. Drabek (Plsen, Czech Republic)

E. Fontich (Barcelona, Spain)

A. Fursikov (Moscow, Russia)

J.-P. Gauthier (Dijon, France)

D. Ruiz (Granada, Spain)

**DEADLINE**  
**30 April 2006**