WORKSHOP ON THE THEORY AND USE OF REGIONAL CLIMATE MODELS

26 May – 6 June 2003 Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP) is organizing a Workshop on the "Theory and Use of Regional Climate Models" to be held from 26 May to 6 June 2003, in Trieste, Italy. The directors of the workshop are Filippo Giorgi (ICTP, Italy), Jeremy Pal (ICTP, Italy), and Elfatih Eltahir (MIT, U.S.A.).

Regional climate models are very important climate research tools available to scientists from developing countries. During the last several years the ICTP Physics of Weather and Climate (PWC) group has maintained, developed and distributed a state-of-the-art regional climate model (RegCM), which is currently used by a variety of groups for a wide range of studies. This workshop is intended to provide lectures and extensive hands-on sessions on the theory of regional climate change and regional climate modeling as well as the use of the RegCM modeling system. A new version of the RegCM will be released at the workshop.

An objective of the workshop is to expand and strengthen the network of model users and to develop collaborative research projects across the network to improve the understanding of climate change at the regional scale. The workshop will also provide a forum for current and future model users to discuss relevant issues, exchange research experiences and formulate needs and priorities for further model development and dissemination. A limited number of students is envisioned, with proven experience in atmospheric modeling and strong interest in using the RegCM system for regional climate studies. It is also envisioned that this will be the first of a regular series of ICTP workshops.

The workshop will cover the following **topics**:

- The physical processes that regulate regional climates
- Climate change at the regional scale
- Regional climate information from global climate models
- Uncertainties in regional climate change projections
- Regional climate modeling
- The ICTP-PWC regional climate model (RegCM)
- Current applications of the RegCM

Invited lecturers include R. Arritt (Iowa State Univ., U.S.A.), E. Eltahir (MIT, U.S.A.), F. Giorgi (ICTP, Italy), S. Hostetler (USGS, U.S.A.), G. Jenkins (Penn State Univ., U.S.A.), L. Mearns (NCAR, U.S.A.), J. Pal (ICTP, Italy), J. Qian (IRI, U.S.A.), Y. Sato (MRI, Japan), F. Semazzi (N. Carolina State Univ., U.S.A.), S. Seneviratne (ETH, Switzerland), A. Seth (IRI, U.S.A.), L. Sloan (U.C. Santa Cruz, U.S.A.), S. Solomon (NOAA, U.S.A.), Z.-C. Zong (CAS, P.R. China).

The workshop is intended for scientists and graduate students working in the areas of Atmospheric Physics and Dynamics, Climatology, Oceanography, Physics and Mathematics, from all member countries of the United Nations, UNESCO and IAEA. Although the main purpose of the ICTP is to help researchers from developing countries through a program based on international cooperation, scientists from developed countries are also welcome to attend. The activity will be conducted in English.

Limited funds are available for applicants from, <u>and working in</u>, developing countries only, to be selected by the organizers. There is no registration fee. Individuals interested in participating should submit an application to arrive no later than 10 FEBRUARY 2003.

The application form can be downloaded from the workshop web page http://agenda.ictp.trieste.it/age.php?id=a0269 or obtained by sending an e-mail message to smr1504@ictp.trieste.it with the subject "get index".

Please send your completed application form via e-mail, fax, or post to:

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