



6th ICTP Workshop on the Theory & Use of **REGional Climate Models** May 7 - 18, 2012

The Abdus Salam International Centre for Theoretical Physics (Abdus Salam ICTP) is organizing the **6th ICTP Workshop on The Theory and Use of REGional Climate Models**, to be held from **May 7 to 18, 2012**, in Trieste, Italy.

The ICTP regional climate modeling system RegCM is being used by a large scientific community for a wide range of applications, from regional process studies to paleoclimate, climate change, chemistry-climate and biosphere-atmosphere interactions. A new version of the model, RegCM4, has been recently completed and released. This version is a substantial evolution compared to previous ones, and further developments have been recently added, including the Tiedtke convection scheme, coupling with the ROMS ocean model and coupling with a full gas phase chemistry mechanism.

As in previous workshops of this series, this event 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.

This workshop will have a **new focus** never addressed previously - *the coupling of different components of the climate system at the regional scale*. It is being increasingly recognized that coupled processes across the atmosphere, ocean, biosphere and chemosphere are important not only at the global but also at the regional scale. For this reason many regional modeling systems are evolving to include coupled ocean, chemistry and biosphere as parameters. This topic is of extreme interest to the scientific community and is especially timely.

The **main topics** of the workshop include:

- Modeling and uncertainties of regional scale climate change;
- Regional coupled climate system modeling;
- New developments and applications in the ICTP regional climate model RegCM4.

The workshop is also aimed at providing a forum for current and future model users to discuss relevant issues and formulate needs and priorities for further model development and dissemination. A limited number of participants is envisioned, with proven experience in climate modeling and a strong interest in using the RegCM system for regional climate studies.

PARTICIPATION

The workshop is intended for scientists and graduate students working in the areas of Atmospheric Physics and Dynamics, Climatology, Oceanography, Physics and Mathematics. It is open to scientists from all member countries of the United Nations, UNESCO and IAEA. The activity will be conducted in English, Limited funding (including travel grants) for participation in the conference is available for scientists from developing countries. No registration fee is required. *Registration is free-of-charge for all attendees.*

APPLICATION

The "**On-line Application**" form can be accessed at:
ICTP agenda page:

http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a11161

(Please save and upload file attachments in either: **RTF format, .doc or .pdf**)

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Directors

R. Anyah (U. Connecticut, USA)
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P. Ruti (ENEA, Italy)

Invited Speakers include

E. Coppola (ESP-ICTP)
C. Brankovic (Croatian Met. & Hydrological Service)
S.K. Dash (I.I.T - Delhi, India)
N. Elguindi (ESP-ICTP)
X. Gao (China Met. Administration (CMA))
W. Guiling (U. of Connecticut, USA)
L. Mariotti (ESP-ICTP)
M. Notaro (U. Wisconsin, USA)
T. O'Brien (Berkeley Lab., Earth Sciences Division, USA)
B. Onol (Istanbul Technical U.)
J. Qian (U. Massachussets, USA)
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P. Ruti (ENEA, Italy)
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A. Tawfik (U. of Michigan, USA)
G. Tefera Diro (ESP-ICTP)
U. Turuncoglu (Istanbul Technical U.)
A. Zakey (Danish Met. Institute)
P. Zanis (Nat.'l & Kapodistrian U.- Thessaloniki)

Laboratory Instructors

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Application Deadline

February 15, 2012