## Conference on African Drought: **Observations, Modeling, Predictability, Impacts**

2 - 6 June 2008 (Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics, ICTP, is organizing a 'Conference on African Drought: Observations, Modeling, Predictability, Impacts' to be held from 2 - 6 June 2008, in Trieste, Italy.

Between the 1970s and 1990s the African Sahel region experienced one of its worst droughts in history, which caused devastating famine, disease outbreaks and social collapse in different countries of the region. This raised the awareness of the vulnerability of the African continent to climate variability and climate change. As both natural and anthropogenic factors continue to affect the Earth's climate, it is possible that the characteristics and occurrence of African drought might change in the future, providing increasing stress to local societies. Different factors affect African drought, such as natural climate variability, air-sea interactions, land-atmosphere interactions and the radiative forcing of atmospheric aerosols and dust. However, the relative contributions of these factors to the establishment and maintenance of African drought and how these might change in the next decades to centuries are not well known. It is thus imperative to increase our understanding of the processes that determine African drought and their representation in climate models, so as to improve our predictive capability of African drought, its effects on society and ecosystems, and the development of response and mitigation strategies. This conference will bring together international experts to review the state-of-the-art of our knowledge of African drought, its predictability and its impacts, and to discuss research needs in order to improve this knowledge. It will also approach the issue of African drought within the context of global climate change and other issue of African drought within the context of global climate change and other environmental stresses that affect the African continent and will provide a forum to discuss response and mitigation strategies.

#### **Topics covered in the conference include:**

- Historical and paleo observational records of African drought
- Forcing of African drought: air-sea interactions, land-atmosphere interactions, aerosols and dust
- Predictability of African drought
- Modeling of African climate
- Natural vs. anthropogenic factors determining African drought African drought and global climate change
- Impacts of African drought on society and ecosystems
- Observation and modeling needs

The conference will include invited as well as contributed papers. If you would like to present a paper, please include <u>title</u> and a one page <u>abstract</u> together with the application form.

Scientists and students from all countries that are members of UN, UNESCO, or IAEA can attend the Conference. The main purpose of the Centre is to help researchers from developing countries through a programme of training activities within a framework of international co-operation. However, students and post-doctoral scientists from developed countries are very welcome to attend. The activity will be conducted in English. Limited funds are available for some participants from developing countries and in this regard every effort should be made by participants to secure support for their fares (or at least half fare) from their home country. Participants

# Conference on African Drought

### <u>DIRECTORS</u>

K. Cook (Cornell U., U.S.A)

F. Giorgi (*ICTP*, *Italy*)

A. Kamga (ACMAD, Niger)

W. Thiaw (NOAA-CPC, U.S.A.)

### **INVITED SPEAKERS**

R. Anya (Rutgers U., U.S.A.) K. Cook (Cornell U., U.S.A.) A. Giannini (Columbia U., U.S.A.) A. Kamga (ACMAD, Niger) S. Nicholson (Florida State U., U.S.A.) H. Paeth (MPI-Hamburg, Germany) C. Reason (U. Cape Town, South, Africa) F. Semazzi (North Carolina State U., U.S.A.) F. Solmon (CNRS-Toulouse, France) W. Thiaw

whose travel expenses are paid by ICTP are required to attend the entire activity. There is no registration fee.

The Application Form is obtainable from the ICTP WWW server: http://agenda.ictp.it/smr.php?1945 which will be constantly up-dated, or from the activity Secretariat. It should be completed and returned before <u>14 March 2008</u> to the address below or smr 1945@ictp.it (please send file attachments in one of the following formats: pdf (preferably), rtf zipped, or doc).

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(c/o Ms. Gabriella De Meo: de\_meo@ictp.it) the Abdus Salam International Centre for Theoretical Physics Strada Costiera 11, I-34014 Trieste, Italy

(Telephone: +39 - 40 - 2240355 Telefax: +39 - 40 - 2240585 E-mail: SMR1945@ictp.it)

Trieste, December 2007

(NOAA-CPC, U.S.A.) A. Tompkins (ICTP, Italy) Y. Xue (UCLA, U.S.A.)

**DEADLINE**: 14 March 2008