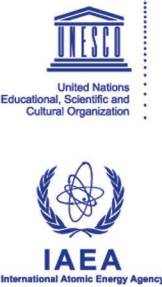




The Abdus Salam
International Centre
for Theoretical Physics
50th Anniversary 1964 - 2014



WCRP-ICTP Summer School on Attribution and Prediction of Extreme Events

21 July – 1 August 2014
(Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP) is organizing, in collaboration with the World Climate Research Programme (WCRP), a Summer School on Attribution and Prediction of Extreme Events, to be held at ICTP, Trieste (Italy), from 21 July to 1 August 2014.

PURPOSE OF THE SCHOOL

The purpose of the School is to train students with outstanding research potential in the techniques that will be required to better understand observed and future changes in extremes. There is a pressing need to educate future researchers in the techniques given the prominence and importance of societal and scientific questions about extreme events that are receiving increasingly intense attention in the minds of the public and their policy makers. The School will be organized around three broad topic areas:

- Statistical theory underpinning extreme value analysis;
- Detection and attribution of observed changes in the frequency and/or intensity of extremes;
- Event attribution, and the physical mechanisms that are involved in amplifying and/or extending the duration of some specific extreme events such as heat waves.

The School will also educate students in the development of some of the key data resources that are used to place current extremes into a historical context, and will provide insights into some of the emerging thinking on the near term prediction of the likelihood of extreme events. The School will also teach the importance of understanding the physical mechanisms that produce many of the most impactful extreme events, including "complex" hydrologic extremes such as drought and the role of coupled land-atmosphere feedback mechanisms in amplifying extreme temperature events.

FORMAT

The two-week School will consist of lectures combined with the practical application of the material covered in the lectures through introductory lab sessions and a set of research problems that will form the core of the School. The research topics will include data set development, detection and attribution, extreme events prediction, and event attribution. These will rely on the use of the advanced analysis techniques that will be taught at the School and an understanding of the relevant underpinning physical processes. The expectation is that at least some of these projects will lead to peer-reviewed publications.

PARTICIPATION

Scientists and students from all countries, which are members of the United Nations, UNESCO or IAEA, may attend the workshop. As it will be conducted in English, participants should have an adequate working knowledge of this language. Although the main purpose of the Centre is to help research workers from developing countries through a programme of training activities within a framework of international cooperation, students and post-doctoral scientists from advanced institutes are also welcome to attend. The Steering Committee will select 30 students, with roughly equal numbers from developing and developed world institutions.

Every effort should be made by candidates to secure support for their fare (or at least half fare). Limited funds are available and will be allocated, on the basis of need and merit. **There is no registration fee.**

HOW TO APPLY

The application form can be accessed at the activity website:
<http://agenda.ictp/smr.php?2595>

Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit online the application form **not later than 31 January 2014**.

Applicants are invited to submit an abstract on their work, as this will aid the selection process. They will have the opportunity to bring a poster and present their work at the School. Additional information on which the selection will be based will be a statement of motivation and a supporting letter from the applicant's supervisor.

IN COLLABORATION WITH:



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**APPLICATION
DEADLINE**

31 January 2014

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