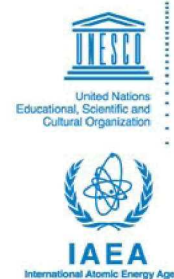




The Abdus Salam  
International Centre for Theoretical Physics



## Joint ICTP/IAEA Workshop on Vulnerability of Energy Systems to Climate Change and Extreme Events

19-23 April 2010  
Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, in collaboration with the International Atomic Energy Agency (IAEA, Vienna, Austria), is organizing a Workshop on Vulnerability of Energy Systems to Climate Change and Extreme Events, to take place from 19 to 23 April 2010.

The objective of this Workshop is to bring together experts from climate change/extreme events, energy systems, risk assessment and energy planning to review the state-of-the-art in the relevant fields and to provide a platform for exploring linkages and for synthesizing knowledge across these domains.

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) in 2007 concluded that, due to the immense inertia of the Earth's biogeophysical system, a considerable degree of climate change will be unavoidable even if very ambitious efforts will be made to curb greenhouse gas emissions over the next few decades. There is a great deal of scientific uncertainty regarding the nature, magnitude and frequency of different extreme weather events as climate change unfolds, but many studies indicate increasing frequency and intensity of such events in most world regions. Extreme weather events will possibly increase old and spawn new threats for energy installations and infrastructure, including those associated with nuclear energy. While there is a reasonably good understanding of the impacts of non-weather natural hazards on energy systems and some initial assessments of climate hazards have been made, there are still many open issues that need to be explored in order to consider the new knowledge in national energy planning. The Workshop will address key scientific and policy relevant issues in this field.

Topics include:

- scientific uncertainties about the changes in the nature, magnitude and frequency of extreme events triggered by anthropogenic climate change, their formulation for use in impact and risk assessments for energy system;
- the impact of these extreme events on energy installations and energy supply infrastructures;
- technological options and policy strategies to reduce exposure and vulnerability and to increase the resilience of energy systems to weather-related and non-weather hazards;
- integration of promising options and strategies in national energy planning and international energy strategies (EU, ASEAN, Latin America, etc.).

Participants are expected to deliver a presentation at the Workshop on one of the above topics or on a case study of impacts of extreme weather events on energy infrastructure in their own country/region. Preference will be given to applicants who declare readiness to prepare and submit a written version as a draft paper of the presentation before the workshop. A short abstract (maximum 400 words) of the proposed presentation should be attached to the application form. File attachments should be in PDF format.

### **PARTICIPATION**

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the activity. 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, a limited number of participants from developed countries are also welcome to attend.

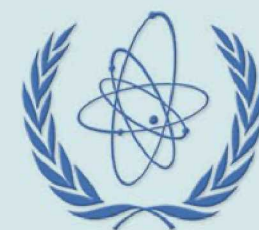
As a rule, travel and subsistence expenses of the participants are borne by the home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants who are nationals of, and working in, a developing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

### **HOW TO APPLY FOR PARTICIPATION**

The application form can be accessed at the activity website: <http://agenda.ictp.it/smr.php?2138>. Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form by **18 December 2009**.

### **SECRETARIAT**

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**IAEA**

International Atomic Energy Agency

### **DIRECTOR**

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Austria

### **LOCAL ORGANIZER**

**C. Tuniz**  
ICTP, Trieste, Italy

### **KEY TOPICS**

**Climate change, extreme  
events and weather hazards**

**Energy infrastructure  
vulnerability and risk  
assessment**

**Technology options and  
policies for adaptation**

**National energy strategies  
and planning**

### **DEADLINE**

**18 December 2009**