



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



## Megathrust Earthquakes and Tsunami

12 - 25 October 2014  
Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics, will organize an *Advanced Workshop on Megathrust Earthquakes and Tsunami* from 12 to 25 October 2014. It will be directed by **R. Madariaga** (Ecole Normale Supérieure, France) and **A. Aoudia** (ESP, ICTP, Italy).

Seismicity at subduction megathrusts is responsible for most of the seismic energy globally released during the last century

Studies of recent giant megathrust earthquakes suggest new outstanding issues and unexpected processes and characteristics regarding the genesis of these events and of the related tsunami waves. These events have re-opened the discussion about which kind of subduction zones are prone to have very large and tsunamigenic events. These subduction zones have been classified in the past following criteria that have been put into question by several recent events. A new view of seismic hazard in subduction zones is emerging that could be of interest to many earthquake scientists in both developing and developed countries.

We propose an advanced workshop and school where the above listed issues and related subjects will be discussed from a fundamental point of view and also with applications in specific subduction zones worldwide.

### TOPICS:

The programme will involve a series of lectures, seminars, discussions and practical exercises in the following topics:

- Seismology of megathrust earthquakes
- Geodesy and remote sensing of megathrust earthquakes
- Paleoseismology of megathrust subduction zones
- Tsunami physics and geology
- Petrological and geological models of megathrust subduction zones
- Mechanical models of megathrust subduction zones
- Rapid detection and characterization of megathrust earthquakes

For those interested in presenting a contribution in oral or poster form during the workshop, please submit a one-page abstract (size A4) with the online application form. File attachments should be in PDF format. Board size for Posters: 1.20 (width) x 1.90 (height) m.

### PARTICIPATION:

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Workshop. As the workshop will be conducted in English, participants should have an adequate working knowledge of that 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 scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants should be 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, and who are not more than 45 years old. Such support is available only for those who attend 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?2609>

Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

### ACTIVITY SECRETARIAT:

Telephone: +39-040-2240576      Telefax: +39-040-2240585  
E-mail: [smr2609@ictp.it](mailto:smr2609@ictp.it)      ICTP Home Page: <http://www.ictp.it/>

### Directors

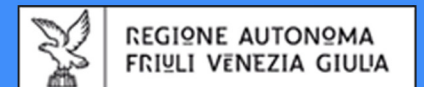
**R. Madariaga**  
ENS, Paris, France

**A. Aoudia**  
ICTP, Trieste, Italy

### Co-Sponsors



IUGG



Regione Friuli Venezia Giulia

### DEADLINE

for requesting participation

**5th August 2014**

(if financial support and/or visa are needed)

**1st September 2014**

(if neither financial support nor visa are needed)