



Conference on Synthetic Aperture Radar: *A global solution to geological hazards* 02 to 06 September 2013 Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics is organizing a Conference on Synthetic Aperture Radar: A global solution to geological hazards from 02 to 06 September 2013.

As the global population continues to increase, so do the number of people exposed to the risk of geological disasters, both natural and manmade. Over the last decade, a large number of high profile earthquakes and volcanic eruptions have caused large-scale economic and humanitarian devastation. Earthquakes alone have resulted in the deaths of ~800000 people and volcanic eruptions in Iceland and Chile caused widespread travel chaos. It is estimated that natural hazards cost \$50 billion dollars annually with additional costs arising from man-made subsidence. In order to assess the potential effects of future hazards, scientists need data. However, in many regions of the world the collection of data from ground-based instruments is logistically difficult and expensive.

Since the launch of the ERS-1 in the early 90's the use of Synthetic Aperture Radar (SAR) for monitoring changes of the Earth's surface has grown dramatically. The remote sensing method utilizes satellites to measure changes in the Earth's surface at a range of spatial and temporal scales. Today, scientists have access to a number of collected over the last 20 years. In 2013, the highly anticipated launch of Sentinel-1 will further increase the SAR catalogue and provide unprecedented data coverage across the globe every 12 days. This conference intends to bring together leading scientists in the field of InSAR to present the latest developments in the field and highlight the capabilities of InSAR for monitoring changes in the Earth's surface associated with past and future geological hazards.

TOPICS TO BE COVERED:

- a) *InSAR methodologies for monitoring ground deformation*
- b) *InSAR applications (tectonics, volcanic deformation, subsidence, landslides)*
- c) *The future of InSAR: a new era of satellite data.*

Call For Papers

For those interested in making an oral or poster presentation during the Workshop, a one-page abstract (size A4) should be uploaded **directly to the on-line application**. (Please upload file attachments in **.pdf**). Board size for Posters: 1.20 (width) x 1.90 (height) m.

PARTICIPATION:

Scientists and post-graduate fellows from all countries that are members of the United Nations, UNESCO or IAEA may attend the activity. The activity will be conducted in English.

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. **Registration is free-of-charge for all attendees.**

APPLICATION:

The "On-line Application" form can be accessed at the:
ICTP activity website: <http://agenda.ictp.it/smr.php?2480>
 inclusive of a **step-by-step instruction guide**.

ACTIVITY SECRETARIAT

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Co-Sponsor:



International Union
 of Geodesy and
 Geophysics (IUGG)

Organizers:

I. Hamling
 Earth System Physics, ICTP
 GNS Science New Zealand

A. Aoudia
 Earth System Physics, ICTP

T. Wright
 School of Earth and Environment,
 University of Leeds

Invited Speakers include:

- Falk Amelung, *U. of Miami, USA*
- Juliet Biggs, *Bristol U., UK*
- Alessandro Coletta, *COSMO Sky-Med, Italy*
- Eric Fielding, *NASA/JPL, USA*
- Ramon Hanssen, *Technical U. Delft, NET*
- Andy Hooper, *Technical U. Delft, NET*
- Sigurjon Jonsson, *KAUST, Saudi Arabia*
- Zhenghong Li, *Glasgow, UK*
- Pierre Potin, *ESA, Italy*
- Matt Pritchard, *Cornell U., USA*
- Stefano Salvi, *INGV, Italy*
- Hua Wang, *Guangdong U. Technology, P.R. China*

DEADLINE
 For requesting participation

15 July 2013

ICTP Home Page: <http://www.ictp.it/>