

The Abdus Salam International Centre for Theoretical Physics





followed by the

Seminar on Development and Use of the Ionospheric NeQuick Model 30 April – 1st May 2012

Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics, in co-operation with the Boston College (BC) of the United States, is organizing a **Workshop on Science Applications of GNSS in Developing Countries** from 11 to 27 April 2012. This Workshop will be combined with the **Third Workshop on Satellite Navigation Science and Technology for Africa**, which did not take place in 2011. It will be directed by Professors **P. H. Doherty** (Boston College, USA), and **S. M. Radicella** (ICTP, Trieste, Italy). The workshop will be followed by the **Seminar on Development and Use of the NeQuick Ionospheric Model** from 30 April to 1st May, 2012.

Local Organiser: Prof. S. Radicella (ICTP.Trieste)

WORKSHOP PURPOSE AND TOPICS:

Global Navigation Satellite Systems provide an enabling technology that can make major contributions to economic growth and societal betterment worldwide. In addition, GNSS signals have been successful in sounding the atmosphere and ionosphere, ocean, land surfaces (including soil moisture) and the cryosphere becoming a powerful new tool for scientific applications. The educational program of this workshop is directed to contribute to creating a knowledgeable workforce necessary for the advancement of science applications of GNSS in developing countries.

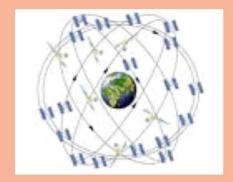
The Workshop will include formal lectures, and hands-on practice particularly oriented towards the scientific exploration using GNSS. Space weather and ionospheric research activities will be stressed.

The Workshops will be taught by worldwide experts in GNSS science and technology.

The Seminar on the NeQuick ionospheric model is aimed to present and discuss its recent developments and uses. This model is widely used by the international scientific community particularly in connection with GNSS science applications.

PARTICIPATION: The Workshop calls for the participation of a number of lecturers/professors from developing countries, and their students, to promote the establishment of GNSS programs and research at the university level in their region. It is important to note that participants already selected for the Abuja Workshop will be given priority from African applications. The activity will be conducted in English, therefore participants should have an adequate working knowledge of this language.

As a rule, travel and subsistence expenses of the participants should be borne by the home



MAIN CO-SPONSORS:

ICTP	Italy
Boston College,	USA

Directors

P. Doherty Boston College, USAS. Radicella ARPL-ICTP, Italy

Workshop Topics

Week 1: Basics of GNSS: System Architecture, Signal Structure, Receiver Technology

Week 2: State of the Art GNSS Applications: Mapping/Surveying, Farming, Robotics, Aviation

Week 3: Scientific Exploration: Solid Earth Science; Space Weather; Ionospheric Studies (TEC, Scintillation, Radio Occultation and Modeling)

institution. Every effort should be made by candidates to secure support for their travel expenses. However, limited funds are available for some participants, who are nationals of, and working, in developing countries. 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 <u>http://agenda.ictp.it/smr.php?2333</u>

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

Deadline for requesting participation: **15 January 2012**

ACTIVITY SECRETARIAT:

 Telephone:
 +39-040-2240576
 Telefax:
 +39-040-2240585

 E-mail:
 smr2333@ictp.it
 ICTP Home Page:
 http://www.ictp.it/

Trieste, November 2011

DEADLINE for requesting participation

