





# Second Workshop on Satellite Navigation Science and Technology for Africa

6 - 24 April 2010 Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics, in co-operation with the Boston College of the United States, is organizing a **Second Workshop on Satellite Navigation Science and Technology for Africa** from 6 to 24 April 2010, under the framework of the cooperation MOU signed by the two institutions. It will be directed by Professors **P. H. Doherty** (Boston College, USA), and **S. M. Radicella** (ICTP, Trieste, Italy). The first workshop successfully took place in 2009.

Local Organiser: **Prof. S. M. 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. International organizations have recognized this fact and have initiated the deployment of infrastructure to allow Africa to exploit this technology. Unfortunately, these developments have been slow due to limited funding and a short supply of educated workers to support GNSS activities in Africa. The educational program of this workshop, like the workshop in 2009, is directed to prepare a future knowledgeable GNSS African workforce that is necessary for the sustainability of this revolutionizing science and technology.

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 in an effort to initiate space science research programs in African universities, and support existing groups in the field.

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

<u>PARTICIPATION</u>: The Workshop calls for the participation of a number of lecturers/professors of African universities and research centres to promote the establishment of GNSS programs and research at the university level in the region. The selected participants will be entitled to propose the participation in the Workshop of up to three students from their university or research centre. A number of candidates upon recommendation by the heads of research groups that participated in the first workshop, are expected to apply. Although the main purpose of the Centre is to help researchers from Africa, through a programme of training activities within a framework of international co-operation, scientists from developed countries are also welcome to apply at their own expense. As the activity will be conducted in English, 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 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, an African country. 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 <a href="http://agenda.ictp.it/smr.php?2135">http://agenda.ictp.it/smr.php?2135</a>

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: 1 December 2009

#### **ACTIVITY SECRETARIAT:**

Telephone: +39-040-2240576 Telefax: +39-040-2240585 E-mail: <a href="mailto:smr2135@ictp.it">smr2135@ictp.it</a> ICTP Home Page: <a href="http://www.ictp.it/">http://www.ictp.it/</a>



## **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 including system architecture, signal structures, receiver and antenna technologies and error sources.

Weekl 2: State of the art of GNSS applications including remote sensing, land, maritime and aviation navigation, and natural resources management.

Week 3: Scientific exploration using GNSS including geodesy, space physics and space weather studies.

#### DEADLINE

for requesting participation

1 December 2009