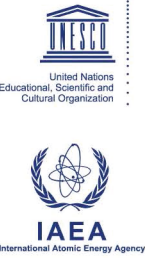




The Abdus Salam  
**International Centre  
 for Theoretical Physics**  
 www.ictp.it



# Workshop and Conference on NeQuick: latest developments and advanced uses

**4 - 8 May 2015**

*Miramare, Trieste, Italy*

The Abdus Salam International Centre for Theoretical Physics (ICTP) is organizing a **Workshop and Conference on NeQuick: latest developments and advanced uses**, which will be held at ICTP, Trieste, Italy, from **4 to 8 May 2015**. The Workshop is co-sponsored by the United States of America and the European Union through the **International Committee on Global Navigation Satellite Systems (ICG)**.

NeQuick 2 is the latest version of the NeQuick ionosphere electron density model developed at ICTP in collaboration with the University of Graz, Austria. It is a quick-run ionospheric electron density model particularly designed for trans-ionospheric propagation applications. The model has been adopted by the International Telecommunication Union, Radiocommunication Sector (ITU-R) Recommendation as an advanced method for TEC modeling and its code is available on-line in the ITU-R site. The original version of the NeQuick model has been used by the European Geostationary Navigation Overlay Service (EGNOS) of the European Space Agency (ESA) for system assessment analysis. A very important application of the NeQuick model is, without doubt, the NeQuickG version implemented by the European Space Agency for ionospheric corrections in the single frequency operation of the European GALILEO satellite navigation system.

The Workshop should allow the participants to be acquainted with the evolution of the model and its validation methodology. The Conference should also be devoted to the presentation of different uses of the NeQuick model and the corresponding results. It is expected that contributions would come from both developed and developing countries scientists.

### Relevance to scientists in Developing Countries:

Ionospheric models are important for Space Weather investigations and for assessment studies in telecommunications and satellite navigation systems. These systems represent a significant contribution to the social and economic development of less privileged countries where complex ionospheric conditions are present. Scientists from these regions will be favored by the use of models like NeQuick for the ionospheric studies related to space weather and to those required to assess the most adequate use of satellite navigation systems in their countries.

### Topics

#### Workshop:

- NeQuick description
- Model validation methodology

#### Conference:

- Present status of ionospheric modeling
- Uses and applications of NeQuick model
- Data assimilation in NeQuick model
- Advanced formulation of the NeQuick Model

### PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Workshop. As it 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, a limited number of students and post-doctoral 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 online application form can be accessed at the activity website <http://indico.ictp.it/event/a14235/>

**ACTIVITY SECRETARIAT:** Telephone: +39-040-2240272      Telefax: +39-040-22407272  
 E-mail: [smr2695@ictp.it](mailto:smr2695@ictp.it)      ICTP Home Page: <http://www.ictp.it/>



## CO-SPONSOR



## DIRECTORS

**S.M. RADICELLA**  
*(ICTP)*

**B. NAVA**  
*(ICTP)*

## LOCAL ORGANIZER

**B. NAVA**  
*(ICTP)*

## DEADLINE

for requesting participation

**22 February 2015**