

Third International School on Atmospheric Radar ISAR-3

25 November - 13 December 2002

Miramare - Trieste, Italy

The *Third International School on Atmospheric Radar, ISAR-3* will be held at the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, from 25 November to 13 December 2002. The School is designed for students and young research scientists with some background in atmospheric science, informatics and/or electronics. It will be directed by **Professors Jürgen Röttger (Max-Planck Institut für Aeronomie, Germany) and D. Narayana Rao (Sri Venkateswara University, Tirupati, India)**. The Faculty will also be composed of the Professors:

- * P. CHILSON, University of Colorado (CIRES) and the NOAA (Environmental Research Laboratory), USA
- * W. HOCKING, University of Western Ontario, Canada
- * R. PALMER, University of Nebraska-Lincoln, USA

LOCAL ORGANIZER

Professor Sandro M. Radicella (ICTP, Trieste)

PURPOSE OF ISAR-3

The main goal of this school is to instruct students to improve the understanding of the applications of radars for studies of the structure and dynamics of the middle and lower atmosphere, i.e. the mesosphere, stratosphere and troposphere.

The activity will include tutorial lectures, intensive training and laboratory work. During the latter the participants, supervised by members of the faculty, will analyze data obtained by different radar techniques.

MAIN TOPICS

The school will cover the following topics:

- **Fundamentals of atmospheric radar**
- **Basic methods, hardware (antenna, transmitter, receiver)**
- **Radar control and digital signal acquisition**
- **Data analysis, validation and interpretation**
- **Special techniques (wind profiling, interferometry, etc.)**
- **Scattering and reflection of radar waves**
- **Atmospheric waves and turbulence**
- **Radar meteorology (troposphere and lower stratosphere)**
- **Middle atmosphere (ionosphere, coupling)**
- **An evening public lecture:
"Radar imaging of our atmosphere"**

The School is sponsored by the Scientific Committee on Solar Terrestrial Physics (SCOSTEP), the International Union of Radio Science (URSI) and The Abdus Salam International Centre for Theoretical Physics (ICTP).

PARTICIPATION

Scientists and students, not more than 45 years of age, from all countries that are members of the United Nations, UNESCO or IAEA may attend the School. Although the main purpose of the ICTP is to help researchers from developing nations through a programme of training activities within a framework of international cooperation, students and postdoctoral scientists from developed countries are also welcome to attend. As the school will be conducted in English, participants must have a good working knowledge of that language.

As a rule, travel and subsistence expenses of the participants are borne by the home institution. However, limited funds are available for some participants from, and working in, developing countries, to be selected by the organizers. **As scarcity of funds allows travel to be granted only in few exceptional cases, every effort should be made by candidates to secure support for their fares (or at least half fare) from their home country.** It is stressed that participants whose travel expenses are paid by the ICTP are required to attend the entire activity. For logistics reasons, connected with the number of Personal Computers available, the total number of participants in the School is limited. There is no registration fee to attend the school.

Those wishing to participate should complete and return the "Request for Participation" form, to be found at the back of Bulletin No. 1 (also obtainable via e-mail: smr1436@ictp.trieste.it, using as subject "*get announcement*", or via WWW Server: <http://www.ictp.trieste.it/>) to:

the Abdus Salam International Centre for Theoretical Physics
Third International School on Atmospheric Radar, ISAR-3
(c/o Ms. Koutou Mabilo)
Strada Costiera 11
I-34014 Trieste, Italy

Deadline for receipt of applications: 31 July 2002

The decision of the Organizers will be communicated to all candidates as soon as possible thereafter.

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