

Sixth Workshop on

Three-Dimensional Modelling of Seismic Waves Generation, Propagation and their Inversion

30 September - 12 October 2002
(Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), in collaboration with the Department of Earth Sciences of the University of Trieste, will organize the Sixth Workshop on studies of seismic wave propagation in realistic three-dimensional earth models and on methods for inversion of seismic data. The Workshop will take place from 30 September to 12 October 2002 and will be co-sponsored by the Training and Mobility Researchers Programme of the European Commission. It is endorsed by the Commission on Earthquake Hazard, Risk and Strong Motion of the International Association for Seismology and Physics of the Earth Interior (Chair, Wu Zhongliang, Beijing), who will be represented by one of its members.

The Workshop will provide training in advanced methodologies of R&D in fundamental studies of the Earth's evolution and dynamics, and in numerous applied problems, such as prospecting for mineral resources, estimation and mitigation of possible seismic hazard, etc. These methodologies are based on a deep understanding of physics of seismic wave generation by natural and artificial sources and the propagation of these waves through complicated Earth structures.

The Workshop will cover practically all aspects of the above mentioned problems, including the theory of propagation, simulation techniques and methods of inversion of seismic waves generated by natural and artificial sources in realistic Earth structures. A set of lectures will be delivered by a winner of the Beno Gutenberg medal, established by the European Geophysical Society in recognition of the scientific achievements of Beno Gutenberg. The medal is reserved for individuals in recognition of their outstanding contributions to Seismology.

Students will be able to get a close acquaintance with the newest developments in all these directions, not only by listening to the intensive lecture courses, but also by active participation in computer demonstrations and exercises. Students are encouraged to make presentations of their recent results related to the school programme.

Topics of the exercises will be:

- Frequency-time analysis;
- Modelling of seismic responses of layered media;
- Source mechanism interpretation using seismic wave data;
- 2D and 3D seismic tomography;
- Earth's seismicity;
- Wave propagation across the Earth;
- Seismological databases.

Scientists and students from all countries that are members of the UN, UNESCO, or IAEA may attend the Workshop. The main purpose of the ICTP is to help researchers from developing countries through a programme of training activities within a framework of international co-operation. However, students and post-doctoral scientists from developed countries are also welcome to attend, and may be supported thanks to the contribution from the European Commission under the Training and Mobility Researchers Programme. As the Workshop will be conducted in English, participants should have an adequate working knowledge of that language. A degree in Physics, Mathematics, Geophysics (theoretical or computational), Computer Science and/or similar disciplines is required.

As a rule, travel and subsistence expenses of the participants should be covered by the home institutions. Funds will be available for participants from developed countries under the EC. As scarcity of funds allows travel to be granted only in a 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 Workshop. For logistic reasons, connected with the number of Personal Computers available, the total number of participants in the Workshop is limited. There is no registration fee for attending the Workshop.

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: smr1429@ictp.trieste.it, by typing on the subject line: *get index*, or via WWW server: <http://www.ictp.trieste.it/>), before **31 May 2002**, to the address below. **If sending an application by e-mail, please save and send file attachments in RTF format.**

the Abdus Salam International Centre for Theoretical Physics
Sixth Workshop on Three-Dimensional Modelling of Seismic Waves
c/- Ms. G. De Meo
Strada Costiera 11
I-34014 Trieste, Italy

(Telephone: +39 - 40 - 2240355 Telefax: +39 - 40 - 2240585 E-mail: SMR1429@ictp.trieste.it)
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Seismic Waves

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DIRECTORS

B.G. Bukchin
(International Institute of
Earthquake Prediction Theory
and Mathematical Geophysics,
Russian Academy of Sciences,
Moscow, Russia)

G.F. Panza
(Dept. of Earth Sciences,
University of Trieste/ICTP, Italy)

Deadline:

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