ADVANCED SCHOOL ON SOURCES OF GRAVITATIONAL WAVES

15 - 20 SEPTEMBER 2003

Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, announces an Advanced School on Sources of Gravitational Waves, to be held in Trieste from 15 to 20 September 2003. This activity is being organized by ICTP in conjunction with the EU-funded Research Training Network for study of the Sources of Gravitational Waves, and draws most of its lecturers from the senior members of that collaboration.

The School will provide a substantial introduction to the study of gravitational waves (GWs), by means of intensive lecture courses, together with associated classes and discussion sessions. In addition to presenting the basic theory, these will cover mechanisms of emission by the sources, the physics of the detectors and the use of computing techniques both for data handling and for computing models of the sources. The computing sections will include an interactive part using the facilities of the ICTP Informatics Laboratory.

The main topics will be:

- Basic theory of gravitational waves
- Astrophysical and cosmological sources of GWs
- GW calculations with perturbative, post-Newtonian and numerical methods
- The physics of GW detectors (interferometers and resonant detectors)
- Methods for extraction of GW signals from observational data

The School will be followed by a one-week international Conference on the same subject area which will be attended by many leading world figures in this field. Students attending the School are strongly encouraged to stay on also for the following conference.

PARTICIPATION

The School is intended for prospective and current research students with a background in physics and mathematics and an interest in gravitational waves. Students from all countries which are members of the United Nations, UNESCO or IAEA may attend the College. As it will be conducted in English, participants should have an adequate working knowledge of this 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, students 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.

DIRECTORS:

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The Application Form is obtainable from the ICTP WWW server: http://agenda.ictp.trieste.it/agenda/current/List.php (which will be constantly up-dated) or from the activity Secretariat. It should be completed and returned before <u>15 April 2003</u> to:



15 April 2003

Advanced School on Sources of Gravitational Waves (smr1517) (c/o Ms. Elizabeth Brancaccio) the Abdus Salam International Centre for Theoretical Physics Strada Costiera 11, 34014 Trieste, Italy. or

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