

## Seventh School on

# Non-Accelerator Astroparticle Physics

26 July - 6 August 2004  
(Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics, (ICTP), will organize the Seventh School on Non-Accelerator Astroparticle Physics, from 26 July - 6 August 2004. The School is also sponsored by the Istituto Nazionale di Fisica Nucleare (INFN).

The field of non-accelerator astroparticle physics encompasses a number of areas including traditional cosmic ray physics, solar neutrino physics, dark matter and dark energy, neutrino oscillations, stability of matter, supernovae, gamma ray and neutrino astronomy, astrophysics, cosmology and particle physics. The School will be pedagogical in nature, providing lectures on the theory, experimental methods, present status of experiments and experimental results and future theoretical and experimental expectations. Hence, the School will be informative to both theoretically and experimentally minded participants. Two poster sessions will be organized to give participants the opportunity to present their work. It is expected that the School Proceedings will be published.

The School will consist of a series of lectures, evening seminars, afternoon poster and discussion sessions covering the following subject areas:

- **PARTICLE AND FIELDS AND CONNECTIONS WITH ASTROPHYSICS**
- **EXPERIMENTAL RESULTS FROM HIGH ENERGY ACCELERATORS**
- **THE EARLY UNIVERSE**
- **NEUTRINO OSCILLATIONS**
- **NEUTRINO PHYSICS AND ASTROPHYSICS**
- **NEUTRINO TELESCOPES**
- **DARK MATTER AND DARK ENERGY**
- **ORIGIN AND COMPOSITION OF COSMIC RAYS**
- **STABILITY OF MATTER**
- **COSMIC SOURCES OF HIGH ENERGY GAMMA RAYS AND NEUTRINOS**
- **EXTENSIVE AIR SHOWER ARRAY EXPERIMENTS**
- **GRAVITATIONAL WAVES AND THEIR DETECTION**
- **SEARCHES FOR NEW PARTICLES AND NEW PHENOMENA**
- **DETECTORS AND DATA ACQUISITION**
- **THE USE OF SPACE FOR FUNDAMENTAL PHYSICS**

Emphasis will be given to new developments since the 2001 Sixth School, in particular in the fields of neutrinos, gravitational waves, gamma ray bursts and future large projects.

Scientists and students from all countries that are members of the UN, UNESCO, or IAEA may attend the School. The main purpose of the Centre 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. 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 participants should be borne by the home institutions. Every effort should be made by candidates to secure support for their fares (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. Scientists from developed countries are welcome to join on their own funds.

There is no registration fee for attending the School. The closing date for requesting participation is **31 March 2004**. If sending an application by e-mail, please save and send file attachments in RTF format.

The **Application Form** is obtainable from the ICTP WWW server: <http://agenda.ictp.trieste.it/smr.php?1574> (which will be constantly up-dated) or from the activity secretariat. It should be completed and returned before **31 March 2004** to the following address:

"Seventh School on Non-Accelerator Astroparticle Physics"  
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## ASTROPARTICLE PHYSICS

Co-Sponsor:  
**Istituto Nazionale  
di Fisica Nucleare**

### DIRECTORS

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**G. Giacomelli**  
(University of Bologna, Italy)

### LOCAL ORGANIZER

**N. Paver**  
(University of Trieste, Italy)

**Deadline:**

**31 March 2004**

