

CONFERENCE ON

Fundamental Symmetries and Fundamental Constants

15 - 18 September 2004

Miramare, Trieste, Italy

The conference will focus on two, probably related, issues of physics beyond the Standard Model: Violation of the fundamental symmetries and time variations of the fundamental constants. Experimental tests, phenomenology and origins of the violation and time variations will be discussed. The question about possible connections of these phenomena to the existence of extra dimensions and the stringy nature of elementary particles will be addressed:

TOPICS:

- **Lorentz invariance violation: theory and experimental tests**
- **CPT violation: theoretical aspects and experimental tests**
- **Pauli principle violation and tests**
- **Equivalence principle: possible violation and tests**
- **QED gauge symmetry: possible violation;
electric charge non-conservation**
- **Time variations of the fundamental constants:
observations and theory**
- **Aspects of non-commutative field theories**
- **Extra dimensions and fundamental symmetries**
- **String theory and violation of symmetries**

PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Conference. 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 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 from developing countries, to be selected by the organizers. There is no registration fee.

The **Application Form** is obtainable from the ICTP WWW server: <http://agenda.ictp.trieste.it/smr.php?1580> (which will be constantly updated) or from the activity Secretariat. It should be completed and returned before **31 May 2004** to:

Conference on Fundamental Symmetries and Fundamental Constants

(smr 1580) (c/o Ms. Suzie Radosic)

the Abdus Salam International Centre for Theoretical Physics

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APPLICATION DEADLINE

31 May 2004