







cpt@ Workshop on the Origin of P, CP and T Violations 2 - 5 July 2008

(ICTP, Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy in collaboration with INFN Trieste, Italy are jointly organizing the CPT@ICTP Workshop, to be held at ICTP, from 2 to 5 July 2008.

PURPOSE:

Half a century has elapsed since the first confirmation of the violation of parity. Soon afterwards CP violation was discovered, and although the standard model seems to correctly describe both phenomena, the origin of the breaking of these symmetries is still not clear. A number of related issues remain open, such as the possible breaking of P and T by strong interactions, the role of fundamental discrete symmetries in cosmology, especially in lepto and baryogenesis, the high energy and high temperature behaviour of these symmetries, to mention a few.

In the dawn of the LHC era, and with the accumulated data on CP violation in K and B physics, it is desirable to address in depth the phenomenology and cosmology of the fundamental discrete symmetries and the theoretical ideas on their origin. We wish to bring together a number of leading experts in both theory and experiment in order to assess the state of art in the field.



TOPICS COVERED INCLUDE:

CP Violation in K and B Physics; Strong CP Problem; Electric Dipole Moments; Spontaneous Versus Hard CP Violation; T Reversal; Origin of P Violation; P Restoration at Colliders; CPT and Lorentz Invariance; Non Perturbative Aspects; New Physics and Fundamental Symmetries; Discrete Symmetries in Cosmology; Baryo and Leptogenesis and Fundamental Symmetries.

PARTICIPATION:

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Workshop. Limited funds are available for some participants, who are nationals of, and working in, a developing country. Such support is available only for those who attend the entire activity. There is no registration fee.

The **Application Form** is obtainable from the Workshop's webpage or the ICTP agenda page, and should be completed, signed and returned before 1 APRIL 2008 to:

> Workshop on the Origin of P, CP and T Violations (smr1951) The Abdus Salam International Centre for Theoretical Physics (c/o Ms. Doreen Sauleek), Strada Costiera 11, 34014 Trieste, Italy

> > <u>or:</u>

mailto:smr1951@ictp.it

(please send file attachments as: either pdf -preferably- or RTF zipped or .doc)

Workshop's webpage: http://users.ictp.it/~smr1951 ICTP agenda page: http://agenda.ictp.it/smr.php?1951 Email: mailto:smr1951@ictp.it

Fax: +39 040 224163;

ICTP Home Page: http://www.ictp.it/



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Deadline for Requesting Participation

1 April 2008

Trieste, January 2008