



Workshop on Quantum Phenomena and Information: From Atomic to Mesoscopic Systems

5 - 16 May 2008

Miramare-Trieste, Italy

This interdisciplinary workshop focuses on the quantum behavior of physical systems that are being investigated in the context of quantum information processing. Special emphasis will be given to atomic systems (cold atoms in optical lattices, trapped ions, etc) and mesoscopic systems (quantum dots, superconducting Cooper pair boxes, etc). Possible ways of interfacing and complementing these systems will be discussed, as well as their applications and connection to information theory. Cavity QED and quantum interference devices represent meeting points of both kind of systems.

The workshop will combine lectures which pedagogically summarize the main challenges and recent results on each area with short presentations, especially from students and postdocs, and roundtable discussions. Poster sessions will be also encouraged to stimulate discussions

PARTICIPATION

Scientists from all countries, which are members of the UN, UNESCO or IAEA, may attend the workshop. The main purpose of the Centre is to help researchers from developing countries, within a framework of international cooperation; however, scientists from developed countries are also welcome to attend. Since ICTP activities are conducted in English, participants should have an adequate working knowledge of this language.

As a rule, travel and subsistence expenses of participants should be borne by their home institution. However, limited funds are available for some participants who are nationals of, and working in, a developing country. **There is no registration fee.**

Interested participants should fill in and submit the [Online Application Form](#) that can be found at: [Agenda page Quantum Phenomena](#) and attach a **c.v. (for students a recommendation letter from their tutor is also requested)**. Kindly send all file attachments in Word or Acrobat format.

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DEADLINE

for requesting participation

20 January 2008

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INVITED SPEAKERS

B. Altshuler (Columbia)

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