IV Adriatico Research Conference on: "QUANTUM INTERFEROMETRY" (neutrons-electrons-photons-atoms)

11 - 15 March 2002 (Miramare - Trieste, Italy)

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This conference follows those held at the ICTP in 1993, 1996 and 1999. It is thus part of an established tradition of excellence aimed at the interdisciplinary, critical confrontation of the methods by which the basic concept of "quantum interference" is investigated in the most recent experiments involving various kinds of particles: photons, neutrons, electrons, excitons, atoms. A great deal of attention will be devoted to the interference properties of extended, multiparticle systems e.g. in the contexts of quantum computation, "Schroedinger-cat" zoology and Bose-Einstein atom condensation. Accordingly, quantum nonlocality, entanglement, teleportation, decoherence, quantum entropy and thermodynamics will become the key words of a large part of the Conference.

A tentative list of speakers includes:

E. Arimondo (Pisa)
 M. Dariano (Pavia)
 I. Cirac (Munich)
 L. Hardy (Oxford)
 M. Rasetti (Torino)
 V. Buzek (Bratislava)

D. Greenberger (New York) M. Inguscio (Firenze)

A. Peres (Haifa)

H. Walther (Garching)

R. Blatt (Innsbruck)

The Conference has been organized in collaboration with Istituto Nazionale di Fisica della Materia.

The Conference is open to research workers from all countries that are members of the United Nations, UNESCO or IAEA. The main purpose of the Centre is to help researchers from developing countries within a framework of international cooperation. However, students and post-doctoral scientists from developed countries are also welcome to attend. As the Conference will be conducted in English, participants should have an adequate working knowledge of that language.

As a rule, travel and subsistence expenses of the participants are borne by the home institutions. However, some funds are available which permit the Centre to grant a subsistence allowance to a limited number of people from developing countries who will be selected by the Organizers. As scarcity of funds allows travel to be granted only in few exceptional cases, every effort should be made by candidates to secure support for their fares by their home country. Such financial support is available only to those attending the entire Conference. Scientists from developed countries are welcome to join on their own funds. There is no registration fee for attending the Conference. The closing date for receipt of requests for participation is 15 December 2001. The completed request for participation form (obtainable via e-mail: smr1134@ictp.trieste.it, by typing on the subject line: get index, or via WWW server: http://www.ictp.trieste.it/), should be sent to:

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