

**Associazione MQC2**  
**Città della Scienza**  
**Istituto Italiano per gli Studi Filosofici**  
**con il patrocinio della Regione Campania**

**III INTERNATIONAL WORKSHOP on**

**"Macroscopic Quantum Coherence  
and Computing"**

Città della Scienza, Via Coroglio 104, Napoli, Italy

3-7 June, 2002



in collaboration with:

Consiglio Nazionale delle Ricerche (CNR)

Seconda Università di Napoli (SUN)

European Office of Aerospace Research and Development (EOARD)

Università di Napoli "Federico II": Rettorato, Dipartimento di Scienze Fisiche, Polo delle Scienze e delle Tecnologie

Istituto Nazionale di Fisica della Materia (INFM): Sezione D "Magnetismo, Metalli e Supercondutività", Sezione di Napoli

Istituto Nazionale di Fisica Nucleare (INFN)

The aim of the workshop is to report on the recent theoretical and experimental results on the macroscopic quantum coherence of macroscopic systems. Particular attention will be given to the coherence effects in Josephson systems. The correlation with other atomic and molecular systems, exhibiting a macroscopic quantum coherence behaviour, is also discussed. Such proposals will be considered for implementation of various schemes for coherent information processing and quantum computation.

**Steering Committee**

**Anthony Leggett**

University of Illinois at Urbana-Champaign, IL USA

**Berardo Ruggiero**

Istituto di Cibernetica del CNR, Pozzuoli, Italy

**Paolo Silvestrini**

Seconda Università di Napoli, Aversa, Italy

**Scientific Committee**

**S. De Franceschi**

Delft University, Delft, The Netherlands

**J. Pekola**

University of Yväskylä, Finland

**G. Falci**

Università di Catania, Italy

**M. Rasetti**

Politecnico di Torino, and INFM, Italy

**J. Lukens**

State University of N.Y. at Stony Brook, NY, USA

**A. Tagliacozzo**

Università di Napoli "Federico II" and INFM, Italy

**J.E. Mooij**

Delft University, Delft, The Netherlands

**H. Weinstock**

AFOSR-NE Arlington, VA, USA

**Speakers list will include:** **D.V.Averin**, University of New York at Stony Brook, NY-USA - **R. Blick**, L.Maximilians University, München, Germany - **F. Cataliotti**, Università di Firenze, Italy - **I. Chuang**, IBM Almaden Center, San Jose, CA-USA - **J.Clarke**, University of California, Berkeley, CA-USA - **V. Corato**, Istituto di Cibernetica "E. Caianiello" - CNR, Pozzuoli, Italy - **D. Cory**, MIT, Cambridge MA-USA - **C. Cosmelli**, Università di Roma "La Sapienza", Italy - **V. Crespi**, Pennsylvania State University, USA - **S. Das Sarma**, University of Maryland, College Park, USA - **P. Delsing**, Chalmers University of Technology, Göteborg, Sweden - **K. Esslin**, ETH, Zurich, Switzerland - **D. Esteve**, CEA - Saclay, France - **G. Falci**, Università di Catania, Italy - **M. Feldman**, University of Rochester, NY -USA - **D. Haviland**, Royal Institute of Technology, Stockholm, Sweden - **F. Hekking**, CNRS, Grenoble, France - **L. Kouwenhoven**, Delft University of Technology, The Netherlands - **L. Kuzmin**, Chalmers University of Technology, Göteborg, Sweden - **A. Leggett**, University of Illinois at Urbana-Champaign, IL-USA - **R. Leoni**, IESS-CNR, Roma, Italy - **J. Lin**, National University of Singapore, Singapore - **J.Lukens**, State University of New York at Stony Brook, NY-USA - **C. Marcus**, Harvard University, Cambridge, MA-USA - **J.E. Mooij**, Delft University of Technology, The Netherlands - **Y. Nakamura**, NEC Laboratories, Tsukuba, Japan - **H. Park**, Harvard University, Cambridge, MA-USA - **J . Pekola**, University of Jyväskylä, Finland - **J. Ralph**, University of Liverpool, England - **M. Rasetti**, Politecnico di Torino, Italy and INFM, Italy - **T. Ruseckas**, Department of Engineering and Applied Sciences, Harvard, MA-USA - **P. Sheng**, University of Science and Technology, Hong Kong, China - **L. Stodolsky**, Max Planck Institut, München, Germany - **A. Tagliacozzo**, Università di Napoli, Italy - **A. Zorin**, PTB Braunschweig, Germany.

**Workshop Secretariat:**Anna Maria Mazzarella

Istituto di Cibernetica "E. Caianiello" - CNR, Via Campi Flegrei 34,I80078, Pozzuoli (Naples),Italy – phone: (+039 081) 8675269/5442852 -fax:(+039 081)8672604  
http://www.mqc2.it - e-mail: am.mazzarella@cib.na.cnr.it and annamariahilliard@libero.it