

## CALL FOR PAPERS

# ERATO Conference on Quantum Information Science 2003 (EQIS'03)

September 4-6, 2003, Kyoto, Japan

Sponsored by ERATO Quantum Computation and Information Project, JST

<http://www.qci.jst.go.jp/eqis03/>

### Conference Chair:

Hiroshi Imai, ERATO/Univ. Tokyo

### Conference Vice-Chair:

Kazuo Iwama, ERATO/Kyoto Univ.

### Keynote Speaker:

Yoshihisa Yamamoto, Stanford Univ.

### Invited Speakers:

Andris Ambainis, Univ. Latvia

Charles H. Bennett, IBM

Vladimír Bužek, Slovak Academy Sci.

Kazuo Iwama, ERATO/Kyoto Univ.

Masanao Ozawa, Tohoku Univ.

Martin Plenio, Imperial College

Shigeki Takeuchi, Hokkaido Univ.

Jaw-Shen Tsai, NEC

Harald Weinfurter, München Univ.

### Program Committee:

Jozef Gruska, Masaryk Univ., Chair

Keiji Matsumoto, ERATO/NII, Vice-Chair

Charles H. Bennett, IBM

Thomas Beth, Univ. Karlsruhe

Osamu Hirota, Tamagawa Univ.

Nobuyuki Imoto, SOKEN

Masahiro Kitagawa, Osaka Univ.

Hoi-Kwong Lo, Univ. Toronto

Masanao Ozawa, Tohoku Univ.

Masahide Sasaki, CRL/CREST

Peter W. Shor, AT & T Labs

Reinhard F. Werner, TU Braunschweig

The EQIS meetings are to focus on quantum information science and technology, a new interdisciplinary field bridging computer science, quantum physics, mathematics, optics- and nano-technologies. EQIS'03 will be the third conference in a series and is to concentrate on theoretical and also experimental aspects of quantum information science. Program of EQIS'03 will consist of invited talks, short communications and posters. Contributions for short communications and posters will be solicited in the research areas related to quantum information science, including, but not limited to:

- design and analysis of quantum algorithms and circuits
- quantum games, and quantum cryptography
- quantum computational and communication complexity
- quantum computing and automata models
- quantum information theory, and quantum entanglement
- quantum fault-tolerant and decoherence-free computations
- quantum continuous variables computations
- quantum geometric and topological computations
- non-standard models of quantum computation
- quantum optics, NMR and solid state technologies
- fermionic, bosonic and anyonic computation

**Paper submission:** Contributions can be submitted only electronically from

<http://www.qci.jst.go.jp/eqis03/>

**Submission deadline:** for oral presentations and posters

**July 15**

**Notification of acceptance and rejection:**

**August 1**

**Contact addresses:** [eqis@qci.jst.go.jp](mailto:eqis@qci.jst.go.jp)

Selected papers will be published in a special issue of International Journal of Quantum Information (IJQI). Restricted number of local supports for young active participants will be available.

EQIS'03 is accompanied by the following two workshops:

- **Quantum Information Theory**, Sept. 2-3, Niijima Kaikan, Kyoto

Chair: Charles H. Bennett (IBM)

**Submission deadline:** for oral presentations

**July 15**

<http://www.qci.jst.go.jp/eqis03/qit-eqis/>

- **Non-locality of Quantum Mechanics and Statistical Inference**

Sept. 8-9, Kyoto Sangyo Univ.

Chair: Akio Sakurai (Kyoto Sangyo Univ.)

**Submission deadline:** for oral presentations and posters

**July 15**

<http://www.kyoto-su.ac.jp/nqsi/>