

CALL FOR PAPERS

EQIS'05

ERATO conference on Quantum Information Science 2005

August 26-30 2005

**National Museum of Emerging Science and Innovation, JST
Tokyo, Japan**

**Organized by ERATO Quantum Computation and Information Project, JST
Cooperated with NII (National Institute of Informatics)**

<http://www.qci.jst.go.jp/eqis05/>

Steering Chair:

Jozef Gruska (Masaryk Univ., Brno)

Conference Chairs:

Hiroshi Imai (ERATO/Univ. Tokyo)
Yoshihisa Yamamoto (NII/Stanford Univ.)

Keynote Speaker:

Ignacio Cirac (Max-Planck Inst.)

Invited Speakers:

Scott Aaronson(Inst. Advanced Study Princeton)
Harry Buhrman(Univ. Amsterdam/CWI)
Wim van Dam(Univ. California Santa Barbara)
Akira Furusawa(Univ. Tokyo)
Nicolas Gisin(Univ. Geneva)
Guang-Can Guo(Univ. Science Tech. China)
Michal Horodecki(Univ. Gdansk)
Serge Massar (Univ. Libre de Bruxelles)
Guifré Vidal(California Inst. Tech.)
XiangBin Wang(ERATO)
Andreas Winter(Univ. Bristol)

Program Committee:

Richard Jozsa (Univ. Bristol, Chair)
Masahito Hayashi (ERATO, Vice-chair)
Charles H. Bennett (IBM)
Hoi Fung Chau (Univ. Hong Kong)
Richard Cleve (Univ. Waterloo)
Richard Gill (Univ. Utrecht)
Guang-Can Guo (Univ. Science Tech. China)
Osamu Hirota (Tamagawa Univ.)
Alexander S. Holevo (Steklov Math. Inst.)
Nobuyuki Imoto (Osaka Univ.)
Jaewan Kim (Korea Inst. Adv. Study)
Masahiro Kitagawa (Osaka Univ.)
Masato Koashi (Osaka Univ.)
Hoi-Kwong Lo (Univ. Toronto)
Keiji Matsumoto (ERATO/NII)
Martin Plenio (Imperial College)
Miklos Santha (Univ. Paris-Sud.)
Masahide Sasaki (NICT)
Peter W. Shor (MIT)
Jaw-Shen Tsai (NEC)
Vlatko Vedral (Imperial College)
Harald Weinfurter
(Ludwig-Maximilians-Univ. München)
Andreas Winter (Univ. Bristol)
Andrew Yao (Tsinghua Univ.)

The EQIS meetings are to focus on quantum information science and technology, a new interdisciplinary field bridging computer science, quantum physics, mathematics, information theory, statistics, and optics- and nano-technologies. EQIS'05 will be the fifth conference in a series and is to concentrate on theoretical and also experimental aspects of quantum information science.

Contributions for short communications and posters will be solicited in the research areas related to quantum information science, including, but not limited to:

- quantum computation, quantum algorithms
- quantum complexity theory
- quantum computing and automata models
- quantum cryptography
- quantum computer simulators
- quantum information theory
- quantum entanglement, additivity / nonadditivity results
- teleportation and entanglement-assisted communication
- quantum estimation theory
- quantum error correction, decoherence
- quantum optics, NMR and solid state technologies

Paper submission:

Contributions can be submitted electronically from
<http://www.qci.jst.go.jp/eqis05/>

Important Dates:

- Submission Deadlines:
 - ★ Oral presentation: **June 6 (Mon)**
 - ★ Poster presentation: **June 20 (Mon)**
- Notification of Acceptance: **July 4 (Mon)**
- Submission Deadline for Final Manuscript: **August 1 (Mon)**
- Early Registration Deadline: **July 11 (Mon)**
- Registration Deadline : **August 18 (Thu)**

Organizing Committee:

Yosuke Kikuchi (ERATO, Chair)
Kae Nemoto (NII, Vice-chair)
Jun Hasegawa(Univ. Tokyo/ERATO)
Michiyuki Amaike(ERATO)
Chie Matsumoto (ERATO)
Takako Sakuragi (ERATO)
Emi Bandai (ERATO)
Yukiko Nakano(NII)

Contact Information:

<http://www.qci.jst.go.jp/eqis05/>
ERATO Quantum Computation and Information Project, JST
5-28-3 Hongo, Bunkyo, Tokyo 113-0033, Japan
TEL: +81-3-3818-3314 FAX: +81-3-3818-3313
E-mail: eqis05@qci.jst.go.jp