# Call for Papers – AQIS'10
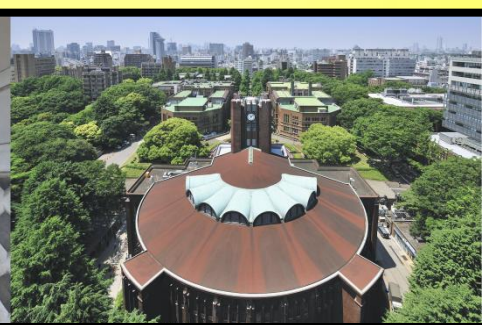# 10th Asian Conference on Quantum Information Science

**August 27-31, 2010**
**The University of Tokyo, Japan**

The 10th Asian Conference on Quantum Information Science (AQIS'10) is a meeting focused on quantum information science and technology. Since this is a new interdisciplinary field, its broad scope includes advances in various fields such as quantum physics, computer science, mathematics and information technologies.

This event is the memorable tenth conference which builds upon a successful series of EQIS'01-05 and AQIS'06-09 conferences. It will comprise presentations of invited speakers, selected papers and posters. Areas of coverage include but are not limited to:

- Quantum computation, algorithms and complexity
- Quantum information theory
- Quantum error-correction and fault-tolerance, thresholds
- Quantum cryptography
- Quantum communications experiments and theory
- Quantum optics, NMR and solid-state technologies
- Quantum processors and computers design
- Quantum programming languages and semantics

## Important Dates:

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| Submission Deadline | June 14 (Monday), 2010 |
| Notification of Acceptance | July 12 (Monday), 2010 |
| Final Draft (2pp.) | July 30 (Friday), 2010 |
| AQIS'10 Tutorial | August 27, 2010 |
| AQIS'10 Conference | August 28-31, 2010 |

## Keynote Speakers:

David Wineland
(NIST, U.S.A.)

Andrew Yao
(Tsinghua Univ., Beijing)

## Invited Speakers:

Dagmar Bruss (HHU Düsseldorf)
Harry Buhrman (Univ. of Amsterdam)
Bill Coish (Univ. of Waterloo)
Jonathan P. Dowling (Louisiana St. Univ.)
Yasunobu Nakamura (NEC Corp.)
(to be confirmed)
Artur Ekert (NUS, Univ. of Oxford)

## Tutorial: (open to the public)

Charles Bennett (IBM)
  "Quantum information theory"
Harry Buhrman (Univ. of Amsterdam)
  "Quantum non-locality"
Richard Jozsa (Univ. of Cambridge)
  "Classical simulation of quantum circuits"
Akihisa Tomita (Hokkaido Univ.)
  "Interplay between quantum computation and quantum information"

## Steering Committee Chair:
Jozef Gruska (Masaryk Univ., Brno)
## Program Committee Chair:
Kae Nemoto (NII, Tokyo)
## Program Committee Co-Chair:
Michele Mosca (Univ. of Waterloo)
## Conference Committee Chair:
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Panos Aliferis (IBM)
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Almut Beige (Univ. of Leeds)
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Warwick Bowen (Univ. of Queensland)
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Nilanjana Datta (Cambridge Univ.)
Akira Furusawa (Univ. of Tokyo)
Jay Gambetta (Univ. of Waterloo)
Hsi-Sheng Goan (National Taiwan Univ.)
Andrew Greentree (Univ. of Melbourne)
Guang-Can Guo (USTC, Hefei)
Satoshi Ishizaka (NEC)
Kazuo Iwama (Kyoto Univ.)
Julia Kempe (Tel-Aviv Univ.)
Jaewan Kim (KIAS, Seoul)
Christian Kurtsiefer (NUS, Singapore)
Julien Laurat (CNRS, France)
Hai Woong Lee (KAIST)
Franco Nori (RIKEN and Univ. of Michigan)
Arun Pati (Institute of Physics, Bhubaneswar)
Jason Petta (Princeton Univ.)
Martin Plenio (Ulm Univ.)
Daowen Qiu (Zhongshan Univ., Guangzhou)
Martin Rötteler (NEC Labs.)
Barry Sanders (Univ. of Calgary)
Miklos Santha (Univ. Paris Sud & NUS)
Ashley Stephens (NII, Tokyo)
Peter van Loock (Max-Planck Institute)
Stephanie Wehner (Caltech)
Andreas Winter (Univ. of Bristol)
Michael Wolf (Univ. of Copenhagen)
Shigeru Yamashita (Ritsumeikan Univ.)
Bei Zeng (IQC, Univ. of Waterloo)
Shengyu Zhang (CUHK, Hong Kong)

Organized by **JST ERATO-SORST QCI Project**,
In Cooperation with
**NII (National Institute of Informatics)**
and **the University of Tokyo**

## Conference web site:
http://www.qci.jst.go.jp/aqis10/

## Contact Information:
JST ERATO-SORST
Quantum Computation and Information Project
5-28-3-201, Hongo, Bunkyo-ku, Tokyo 113-0033, Japan
Tel: +81-3-3818-3314, Fax: +81-3-3818-3313
Email:aqis2010-inquiry@qci.jst.go.jp

## Local Committee:
Hiroshi Imai (Chair)
Jun Hasegawa
Kazuki Yoshizoe
Hiroko Takeshima

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