Quantum Information science has emerged as one of the frontier areas of research in recent years where scientists all over the world are trying to harness the power of information processing using laws of quantum mechanics. In last twenty years or so this field has grown tremendously because of its inter-disciplinary character.

In view of this, there will be an international school & conference on Quantum Information to be held at Institute of Physics, Bhubaneswar, India. The school and conference aim at covering all areas in Quantum Information Science. There will be introductory lectures in the school followed by invited talks in the conference on advanced research topics that include theoretical aspects of Quantum computing, and Experimental activities, Quantum communication, Quantum information processing protocols and related issues. Invited talks will be delivered by world class experts from India and abroad in the field. All the researchers interested in Quantum Information Science can participate. In addition to invited talks we can have oral and poster presentations by young researchers.

The school will be from March 4th to 7th and the conference will be during March 9th to 12th. There will be a break on March 8th.

AIM AND SCOPE OF CONFERENCE

The conference will have several invited talks by experts from India and abroad. This will cover topics both in theory and experiments. This includes, but is not limited to the following topics.

- Quantum Computation and Algorithms
- Quantum Error-correction and decoherence
- Quantum Cryptography
- Quantum Information Theory
- Quantum Entanglement
- Non-locality and Bell Inequalities
- Experimental Quantum Information

In addition to these, we can have invited talks in the area of Quantum Measurement, Geometric Quantum Computation, Continuous variable Quantum Information, Relativistic Quantum Information, Quantum Information Theoretic ideas in other areas like Black Hole physics and many more.

AIM AND SCOPE OF SCHOOL

The school will consist of four consecutive days of talks that cover the basics of quantum information science.

- Quantum Information
- Quantum Computing
- Quantum Cryptography
- Experimental Implementations
- Quantum Teleportation and Communication Protocols

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- Pankaj Agrawal
- Arun K. Pati
- Biswajit Pradhan

For Participation, mail to
ISCQ@iopb.res.in
or, write to
ISCQ-08, Institute of Physics, Sachivalaya Marg,
Bhubaneswar - 751 005, Orissa, India

SCHOOL SPEAKERS

The list of lecturers who have accepted the invitation is as follows. This list is tentative and is subject to last-minute change.

- Caslav Brukner, University of Wein, Austria
- Anthony Cheffes, HP Lab, UK
- Jozef Gruska, Czech Republic
- Guru Prasad Kar, ISI, Kolkata, India
- Sandu Popescu, University of Bristol, UK

CONFERENCE SPEAKERS

The tentative list of invited speakers who have accepted the invitation so far is as follows.

- S. Anwar, Pakistan
- Arvind, India
- S. Bose, UK
- Caslav Brukner, Austria
- Adan Cabello, Spain
- S. Chaturvedi, India
- A. Cheffes, UK
- G. M. D’Ariano, Italy
- J. Eisert, UK
- R. Ghosh, India
- S. Ghosh, India
- D. Goswami, India
- Josef Gruska, Czech Rep.
- D. Home, India
- Anil Kumar, India
- A. S. Majumdar
- S. Pal, India
- P. Panigrahi, India
- S. Popescu, UK
- Daowen Qiu, China
- A. K. Rajagopal, USA
- M. F. Sacchi, Italy
- Debasis Sarkar, India
- Norbert Schuch, Germany
- R. Simon, India
- R. Srikanth, India
- J. Twamley, Australia
- C. S. Unnikrishnan, India
- A. R. Ushadevi, India
- S. Virmani, UK
- Marek Zukowski, Poland
- Karol Zyczkowski, Poland

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