



INSTITUT D' ÉTUDES SCIENTIFIQUES DE CARGESE

20130 Cargèse, Corse (France)

<http://cargese.univ-corse.fr>

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## SUMMER SCHOOL ON QUANTUM LOGIC AND COMMUNICATIONS

CARGESE, CORSICA, FRANCE, August 16-28, 2004

### Organising committee:

Izo Abram (CNRS / LPN, Marcoussis, France)

Philippe Boucaud (CNRS / IEF, Orsay, France)

Philippe Grangier (CNRS / LCFIO, Orsay, France)

This summer school will consist of courses, seminars and poster sessions on topics related to quantum information processing, quantum communications and quantum cryptography. The school is supported by the European Commission, CNRS, MJENR-MDRNT, and DGA, and it is open to researchers world-wide from academia or industry. The cost of the school including lodging is 1400 euros. A large variety of scholarships will be available, especially for young researchers who are encouraged to apply. Courses will be given on the following subjects :

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|--|------------------|
| • Classical and quantum theory of information              | Nicolas Cerf     |
| • Quantum algorithms                                       | Richard Jozsa    |
| • Quantum error correction                                 | Isaac Chuang     |
| • Entanglement and decoherence                             | Serge Haroche    |
| • Purification and distillation of entanglement            | Ignacio Cirac    |
| • Physics of quantum communications and cryptography       | Nicolas Gisin    |
| • Implementations of quantum cryptography                  | Anders Karlsson  |
| • Solid-state systems for quantum information processing   | Eli Yablonovitch |
| • Single-photon devices for quantum information processing | Yoshi Yamamoto   |

To qualify for support : deadline 15 April 2004

Paying attendees deadline : 15 May 2004

For more information consult the web site : <http://www.france-optique.org>

**Location :** The Institute is located on the seashore of the island of Corsica, 50 km north of Ajaccio, 2 km south of Cargèse, a pleasant village of considerable charm and historic interest.

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L'I.E.S.C. est affilié au Centre National de la Recherche Scientifique et aux Universités de Corse et Nice-Sophia Antipolis.  
Il est subventionné par le MJENR-MDRNT, le CNRS et la CTC.

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