

Scope of the Workshop

The International Workshop on Solid State Based Quantum Information Processing (QIP2004) will be held at Herrsching close to Munich, Germany, from September 13 to 17, 2004. It is organized by the Cooperative Research Center 631 of the German Science Foundation, which is a joint research effort on solid state based quantum information processing of several research institutions in the greater Munich area.

The aim of the workshop is to promote an international discussion of the progress in solid state based quantum information processing including hardware concepts, theoretical foundations of solid state based qubits as well as quantum information theory.

Scientific Program

The format will be a two-day summer school (Tues. to Wed.) with 8 two-hour tutorials given by internationally leading scientists and a two-day workshop (Thurs. to Fri.) with invited and contributed talks as well as poster sessions. The afternoon schedule of the workshop will be relaxed to provide time for informal discussions.

Workshop Topics

- superconducting qubits
- quantum dot based qubits
- coherence in solid state based qubits
- deterministic photon sources
- controlling decoherence
- quantum error correction
- theoretical methods
- flying qubits

Organization Committee

- Rudolf Gross (WMI, Garching)
- Jonathan Finley (WSI, Garching)
- Sigmund Kohler (Augsburg)
- Stefan Ludwig (CeNS, Munich)
- Achim Marx (WMI, Garching)
- Matthias Opel (WMI, Garching)

Program Committee

The program committee is formed by the members of the Cooperative Research Center 631, see

<http://www.wmi.badw.de/SFB631>

Contact Address

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Web site

<http://www.wmi.badw.de/SFB631/QIP2004>

Abstract Submission

Abstracts must be received by **July 1, 2004**. Talks and posters will be selected from the abstracts, which can be submitted through the website at:

<http://www.wmi.badw.de/SFB631/QIP2004>

Participants will be notified by July 15 of the status of their contributions.

Registration

Registration has to be done online via the workshop web site.

The registration fee includes all meals and coffee breaks for the duration of the workshop as well as attendance to all workshop functions. The fee for early registration is

€220

Details regarding methods of payment will be posted on the workshop web site and distributed with abstract acceptance.

Deadlines

July 01, 2004:	Abstract submission
July 30, 2004:	Early registration
August 15, 2004:	Hotel reservation

Invited Speakers^(mostly confirmed)

A: Lecturers for Summer School

- Daniel Esteve (Saclay)
- Milena Grifoni (Regensburg)
- Rudolf Gross (Garching)
- Atac Imamoglu (Zurich)
- Axel Kuhn (Garching)
- Daniel Loss (Basel)
- Hans Mooij (Delft)
- Lieven Vandersypen (Delft)
- Birgitta Whaley (Berkeley)

B: Workshop Speakers

- Jeremy Baumberg (Southampton)
- Andrea Bertoni (Modena)
- Dirk Bouwmeester (Santa Barbara)
- Robert G. Clark (Sydney)
- Per Delsing (Göteborg)
- Jon Finley (Garching)
- Khaled Kharrari (Munich)
- Sigmund Kohler (Augsburg)
- Tilmann Kuhn (Münster)
- Christoph Lineau (Berlin)
- John Martinis (Boulder)
- Yuli Nazarov (Delft)
- Mike Raymer (Eugene)
- Fausto Rossi (Modena)
- Andrew Shields (Cambridge)
- Duncan Steele (Michigan)
- Hideaki Takayanagi (NTT)
- Andreas Wallraff (Yale)
- Frank Wilhelm (Munich)

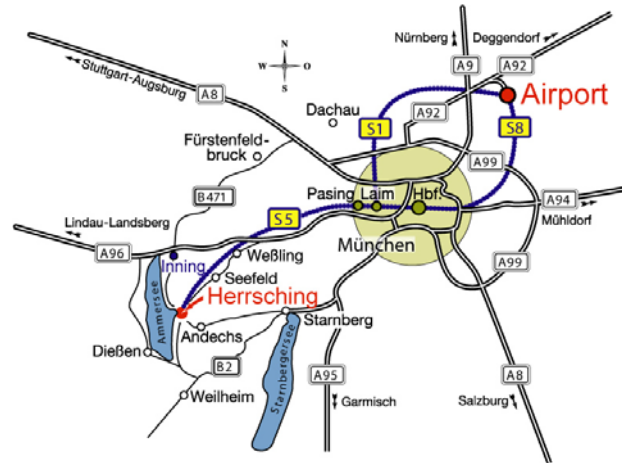
Funding Support

The workshop is supported by



Location and Travel Information

Herrsching is located in the southern part of Germany, about 30 km south-west of Munich at the beautiful Ammersee close to the German alps. Herrsching can be reached from Munich airport by the city railway S1/S8 and S5 via Munich main station.



Venue

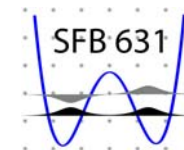
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Accommodation

Accommodation is available at the workshop site for a maximum of 110 persons in single (50 € per night) and twin rooms (45 € per night). Rooms are placed on a first come first serve basis. Further rooms are available in nearby hotels listed on the web site. Hotel reservations should be made before August 15, 2004.

International Workshop on Solid State Based Quantum Information Processing QIP 2004

September 13 – 17, 2004
Herrsching, Bavaria



organized by the
Cooperative Research Center 631
on
*Solid State Based Quantum
Information Processing*

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