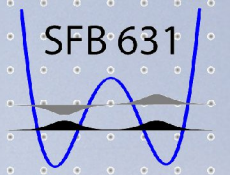




International Workshop on Solid State Based Quantum Information Processing QIP 2004

September 13-17, 2004 in Herrsching, Bavaria

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



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

Organization Committee

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

Prof. Dr. Rudolf Gross and **Dr. Achim Marx**
Walther-Meissner-Institute
Bavarian Academy of Sciences and Technical University of Munich
Walther-Meissner-Str. 8
85748 Garching, GERMANY

phone: +49-89 289 14201
fax: +49-89 286 14201
web: <http://www.wmi.badw.de>
email: QIP2004@wmi.badw.de

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.

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

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.

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 fee for early registration is **€ 220**

The registration fee includes all meals and coffee breaks for the duration of the workshop as well as attendance to all workshop functions. Details regarding methods of payment will be posted on the workshop web site and distributed with abstract acceptance.

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.



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**.

Invited Speakers (mostly confirmed)

Lecturers for Summer School

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

Workshop Speakers

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

Important Deadlines

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

Venue

Educational Center of the
Bavarian Agricultural Association
Rieder Straße 70
82211 Herrsching, GERMANY

phone: +49 - 8152 938 000
fax: +49 - 8152 938 224
web: www.bbv-bildungsstaette.de
email: info@BBV-Bildungsstaette.de



This workshop is supported by



Bayerische Akademie
der Wissenschaften

Deutsche
Forschungsgemeinschaft
DFG

Deutsche
Forschungsgemeinschaft