ulius-Maximilians-Universität Würzburg Bavaria • Germany

# Summer School 2011

for Master- and PhD-Students



Department of Mathematics

July 24-31, 2011



# Recent Trends in Quantum Control and Quantum Information Theory

Lecturers: **Pierre Rouchon** École des Mines, Paris , France **Michael Wolf** Technische Universität, München, Germany Organizers: Uwe Helmke, Gunther Dirr

www.mathematik.uni-wuerzburg.de/summerschool

scholarships available

registration and fees, scholarships, schedule, program, accommodation contact: sommerschule@mathematik.uni-wuerzburg.de

Apply and register online till May 20, 2011

# Topics

- Non-linear control theory and Lie group techniques in Quantum Control, controlled Liouville/von Neumann and Lindblad/Kossakowski master equations, ...
- Mathematical foundations of Quantum Information Theory, operator-valued measures, completely positive operators, quantum channel capacities, ...

#### Audience

Master and PhD students in Mathematics or Theoretical Physics (Postdocs or advanced Bachelor students on an individual basis)

#### Venue and Accommodation

- Lectures will take place at the Department of Mathematics south to the city centre. Accomodation will be provided nearby in walking distance.
- There are every ten minutes buses to the city centre and to the railway station (10 minutes to the city centre, 15 minutes to the railway station).

# Scholarships/Fees

- Enrollment 200 € (including local public transport)
- Accommodation 240 € (6 nights including breakfast)
- Foreign students may apply for a scholarship to cover travelling, accommodation and enrollment.

# Deadlines/Schedule

- Application online till May 20th
- Application for scholarships online till May 15th
- Check in, registration July 24th
- Lectures, workshops July 25th till 30th
- Farewell party July 31st

# **Social events**

- Sightseeing (historical centre of Würzburg world cultural heritage)
- Wine tasting
- Excursion
- Barbecue

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