



Quantum Optics, Quantum  
Nanophysics &  
Quantum Information

CoQuS

Complex  
Quantum  
Systems



TECHNISCHE  
UNIVERSITÄT  
WIEN

VIENNA  
UNIVERSITY OF  
TECHNOLOGY

## Guest lectures by

**Prof. Gerard Milburn**

University of Queensland - Brisbane/AUSTRALIA  
on

Quantum measurement and control in quantum optics and condensed matter  
physics (LV-Nr.: VO 260104)

and

Advanced topics in quantum optics and quantum information  
(LV-Nr.-Nr. SE 260105)

| When                     | Lectures        | Seminars        |
|--------------------------|-----------------|-----------------|
| Tuesday, Dec. 2nd, 2008  | 8:00 – 10:00 h  | 10:00 – 12:00 h |
| Friday, Dec. 5th, 2008   | 8:00 – 10:00 h  |                 |
| Tuesday, Dec. 9th, 2008  | 8:00 – 10:00 h  | 10:00 – 12:00 h |
| Monday, Dec. 15th, 2008  | 10:00 – 12:00 h |                 |
| Tuesday, Dec. 16th, 2008 | 8:00 – 10:00 h  | 10:00 – 12:00 h |
| Monday, Jan. 12th, 2009  | 10:00 – 12:00 h |                 |
| Tuesday, Jan. 13th, 2009 | 8:00 – 10:00 h  | 10:00 – 12:00 h |
| Monday, Jan. 19th, 2009  | 10:00 – 12:00 h |                 |
| Tuesday, Jan. 20th, 2009 | 8:00 – 10:00 h  | 10:00 – 12:00 h |
| Monday, Jan. 26th, 2009  | 10:00 – 12:00 h |                 |
| Tuesday, Jan. 27th, 2009 | 8:00 – 10:00 h  | 10:00 – 12:00 h |
| Monday, Feb. 2nd, 2009   | 10:00 – 12:00 h |                 |

The lecture will give an introduction into

- Quantum Measurement Theory
- Quantum Parameter Estimation
- Open Quantum Systems
- Quantum Trajectories
- Quantum Feedback Control
- State-Based Quantum Feedback Control
- Applications to Quantum Information Processing

IQOQI Seminarraum 2.08

Boltzmannngasse 3, 2. Stock, 1090 Wien