

Program

Wednesday, June 13

Registration

18h00 *Dinner*

Thursday, June 14

08h45 – 09h00 Welcome

Session 1:

09h00 – 09h45 Jean-Michel Raimond: Observing the quantum jumps of light

09h45 – 10h30 Michael Chapman: Single atoms in the cavity QED strong coupling regime

10h30 – 11h00 *Coffee*

Session 2:

11h00 – 11h45 Péter Domokos:
Many-body physics with atoms in a cavity and without a cavity

11h45 – 12h30 Kater Murch:
Cold Atomic Ensembles in the Strong Coupling Regime of Cavity QED

12h30 – 14h00 *Lunch*

Session 3:

14h00 – 14h45 Jörg Helge Müller: Towards an atom-light quantum interface with Rb BEC

14h45 – 15h30 Kristian Helmerson: Vortices and persistent currents: Rotating a Bose-Einstein condensate using photons with orbital angular momentum

15h30 – 16h15 Immanuel Bloch: Entangling Neutral Atoms in Optical Lattices

16h15 – 16h45 *Coffee*

Session 4:

16h45 – 17h30 Ferdinand Schmidt-Kaler: Trapped ions for quantum computing

17h30 – 18h00 Victor Balykin:
Atom parallel fabrication of nanostructures with laser nanofields

18h00 – 18h30 Claus Zimmermann: Atom optics integrated on a micro chip

19h00 *Dinner*

Friday, June 15

Session 5:

- 09h00 – 09h45 Julien Laurat:
Quantum networking with atomic ensembles in the single excitation regime
- 09h45 – 10h30 Almut Beige: Atomic cluster state built up with macroscopic heralding
- 10h30 – 11h00 *Coffee*

Session 6:

- 11h00 – 11h45 Harald Weinfurter:
Atom-Photon entanglement and Remote State Preparation of qubit Memories
- 11h45 – 12h30 Peter Maunz: Quantum Interference of Photon Pairs emitted from Two Remote Trapped Ytterbium Ions
- 12h30 – 14h00 *Lunch*
- 14h00 – 17h00 *Boat-Trip*

Session 7:

- 17h00 – 17h45 Jörg Schmiedmayer: Quantum interfaces for ultracold atoms
- 17h45 – 18h30 Gerhard Rempe:
Interfacing individual atoms and single photons using optical cavities
- 19h00 *Dinner*

Poster Session

20h00 – open end

Saturday, June 16

Session 8:

- 09h00 – 09h45 Ignacio Cirac: Quantum simulations with classical and quantum systems
- 09h45 – 10h30 Reinhard Werner:
Graph states and their generation by Clifford cellular automata
- 10h30 – 11h00 *Coffee*

Session 9:

- 11h00 – 11h45 Antoine Browaeys: Single atoms in optical tweezers for quantum computing
- 11h45 – 12h30 Dieter Meschede: Atom by atom towards controlled quantum systems
- 12h30 – 14h00 *Lunch*
- Departure*