



**SFB/Transregio 21**

**Workshop 2011**

**CO.CO.MAT**  
**Common perspectives**  
**of mesoscopic systems**  
**and quantum gases**

November, 13th – November 16th, 2011  
Schloss Reisenburg, Günzburg

<b>Arrival:</b>	<b>Sunday, November 13<sup>th</sup> (evening)</b>
<b>Departure (non SFB):</b>	<b>Wednesday, November 16<sup>th</sup> (after breakfast)</b>
<b>Departure (SFB):</b>	<b>Wednesday, November 16<sup>th</sup> (afternoon, after coffee break)</b>

**CO.CO.MAT**



## Program Schedule

Monday, November 14<sup>th</sup>, 2011

<b>07:30 – 08:30</b>	Breakfast	
<b>08:30 – 09:30</b>	Jochen Mannhart (MPI-FKF) <i>"Two-dimensional Electron Systems at Oxide Interfaces"</i>	
<b>09:30 – 10:00</b>	Coffee break	
<b>10:00 – 10:30</b>	Marc Scheffler (Universität Stuttgart) <i>"Towards Strong Coupling of Magnetic Moments to Light"</i>	SFB A3
<b>10:30 – 11:00</b>	Edward Goldobin (Universität Tübingen) <i>"Quantum fractional vortices: status and perspectives"</i>	SFB A5
<b>11:00 – 11:30</b>	József Fortágh (Universität Tübingen) <i>"Cold atom - carbon nanotube interactions"</i>	SFB C9
<b>11:30 – 12:00</b>	Philipp Neumann (Universität Stuttgart) <i>"Control of single spins and small spin ensembles in diamond"</i>	SFB C4
<b>12:00 – 14:00</b>	Lunch	
<b>14:00 – 14:30</b>	Elena Canovi (Universität Stuttgart) <i>"DMRG study of nonequilibrium transport through coupled impurities"</i>	SFB A6
<b>14:30 – 15:00</b>	Hans Peter Büchler (Universität Stuttgart) <i>"Dipole Interaction Mediated Laser Cooling of Polar Molecules to Ultra-cold Temperatures"</i>	SFB B8
<b>15:00 – 15:30</b>	Helge Hattermann (Universität Tübingen) <i>"Superconducting microtraps"</i>	SFB C2
<b>15:30 – 16:00</b>	Thomas Judd (Universität Tübingen) <i>"Interactions between cold atoms and nanostructures"</i>	SFB C10
<b>16:00 – 16:30</b>	Coffee break	
<b>16:30 – 18:00</b>	Poster session	
<b>18:00 – 20:00</b>	Dinner	
<b>20:00 – 21:00</b>	Markus Oberthaler (Universität Heidelberg) <i>"Quantum atom optics at work - squeezing and squeezed vacuum for atomic matterwaves"</i>	

## Tuesday, November 15<sup>th</sup>, 2011

07:30 – 08:30	Breakfast	
08:30 – 09:30	Anna Sanpera (Universitat Autònoma de Barcelona) <i>"Atom gases &amp; Quantum simulators: what is the next?"</i>	
09:30 – 10:00	Coffee break	
10:00 – 10:30	Emanuel Henn (Universität Stuttgart) <i>"Dipolar quantum gases"</i>	SFB A2
10:30 – 11:00	Arne Härter (Universität Ulm) <i>"An ion in a sea of cold Rb atoms"</i>	SFB A8
11:00 – 11:30	Robert Löw (Universität Stuttgart) <i>"Strongly interacting Rydberg gases"</i>	SFB B6
11:30 – 12:00	Alexander Moreno (Universität Stuttgart) <i>"Antiholons and Spin-Charge Separation in the 1D t-J Model"</i>	SFB B4
12:00 – 14:00	Lunch	
14:00 – 14:30	Jürgen Weis (MPI-FKF) <i>"Quantum dot systems for investigating and controlling coherence and correlation effects"</i>	SFB A1
14:30 – 15:00	Michael Jetter (Universität Stuttgart) <i>"Tailoring of coupled III-V quantum dots and their optical properties"</i>	SFB C3
15:00 – 15:30	Fedor Jelezko (Universität Ulm) <i>"Quantum sensing with single spins"</i>	
15:30 – 16:00	Wolfgang Schleich (Universität Ulm) <i>"Fractional Josephson vortices in the quantum limit: past, present, and future"</i>	SFB A5
16:00 – 16:30	Coffee break	
16:30 – 18:00	Poster session	
18:00 – 20:00	Dinner	
20:00 – 21:00	Joachim Wosnitza (HZDR, Dresden) <i>"World record race - Research at high magnetic fields"</i>	

## Wednesday, November 16<sup>th</sup>, 2011

07:30 – 08:30	Breakfast	
08:30 – 09:00	Tommaso Calarco (Universität Ulm) <i>"Pushing to the limit our control of tailored matter"</i>	SFB A7
09:00 – 09:30	Joachim Ankerhold (Universität Ulm) <i>"Atomic physics meets superconducting circuits"</i>	SFB NIF-1
09:30 – 10:00	Coffee break	
10:00 – 10:30	Benjamin Deissler (Universität Ulm) <i>"Ultracold fermions in a hexagonal lattice"</i>	SFB NIF-2
10:30 – 11:00	Kristina Vaklinova (Universität Stuttgart) <i>"Towards single-carbon nanotube/superconducting devices"</i>	SFB NIF-3
11:00 – 12:00	Teilprojektleitertreffen (SFB-interne Veranstaltung)	
12:00 – 14:00	Lunch	
14:00 – 16:00	Ideenwettbewerb (SFB-interne Veranstaltung)	
16:00 – 16:30	Coffee break	