

 **SFB/Transregio 21**

Workshop 2012

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

October, 21st – 24th, 2012
Schloss Reisenburg, Günzburg

Arrival:	Sunday, October 21st (evening)
Departure (non SFB):	Wednesday, October 24th (after lunch)
Departure (SFB):	Wednesday, October 24th (afternoon, after coffee break)


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Program Schedule

Monday, October 22nd, 2012

07:30 – 08:30	Breakfast	
08:30 – 09:30	Rainer Dumke (Nanyang Technological University, Nanyang, Singapore) <i>"Superconducting Atom Chips"</i>	
09:30 – 10:00	Coffee break	
10:00 – 10:30	Darrick Chang (ICFO, Institute of Photonic Sciences, Barcelona, Spain) <i>"Self-organization of atoms along a nanophotonic waveguide"</i>	
10:30 – 11:00	Martin Plenio (Universität Ulm) <i>"Towards a large-scale quantum simulator on diamond surface at room temperature"</i>	SFB B11
11:00 – 11:30	Max Hofheinz (CEA Grenoble, France) <i>"Quantum optics in microwave circuits"</i>	
11:30 – 12:00	Simon Bernon (Universität Tübingen) <i>"Atomic clocks near superconducting structures"</i>	SFB C2
12:00 – 14:00	Lunch	
14:00 – 14:30	Eli Kapon (EPFL Lausanne, Switzerland) <i>"Quantum Photonics with Ordered Quantum Dot Systems"</i>	
14:30 – 15:00	Philipp Neumann (Universität Stuttgart) <i>"Quantum correlations in engineered medium and large scale spin clusters"</i>	SFB C4
15:00 – 15:30	Dennis Heim (Universität Ulm) <i>"Tailored 0-π Josephson junctions as a macroscopic quantum system (Theory)"</i>	SFB A5
15:30 – 16:00	Edward Goldobin (Universität Tübingen) <i>"Tailored 0-π Josephson junctions as a macroscopic quantum system (Experimental)"</i>	SFB A5
16:00 – 16:30	Coffee break	
16:30 – 18:00	Poster session	
18:00 – 20:00	Dinner	
20:00 – 21:00	Corinna Kollath (Université de Genève, Switzerland) <i>"Dynamics induced by dissipation in ultracold interacting gases"</i>	

Tuesday, October 23rd, 2012

07:30 – 08:30	Breakfast	
08:30 – 09:30	Francesca Ferlaino (University of Innsbruck, Austria) <i>"Dipolar Quantum Gases of Erbium Atoms"</i>	
09:30 – 10:00	Coffee break	
10:00 – 10:30	Kristian Baumann (Stanford University, USA) <i>"Quantum degenerate gases of dysprosium"</i>	
10:30 – 11:00	Axel Griesmaier (Universität Stuttgart) <i>"Stability of dipolar gases in optical lattices and new perspectives"</i>	SFB A2
11:00 – 12:00	Michael Köhl (University of Cambridge, UK) <i>"A single ion coupled to an environment"</i>	
12:00 – 14:00	Lunch	
14:00 – 14:30	Jonathan Balewski (Universität Stuttgart) <i>"Tuning Rydberg interaction in frozen and quantum gases"</i>	SFB B6
14:30 – 15:00	Thomas Judd (Universität Tübingen) <i>"Scattering and absorption of cold atoms by nanotubes"</i>	SFB C9
15:00 – 15:30	Johannes Hecker Denschlag (Universität Ulm) <i>"A charged impurity in a cold gas of atoms"</i>	SFB A8
15:30 – 16:00	Pietro Silvi (Universität Ulm) <i>"Quantum linear-zigzag phase transition in ion Coulomb crystals via DMRG"</i>	SFB A7
16:00 – 16:30	Coffee break	
16:30 – 18:00	Poster session	
18:00 – 20:00	Dinner	
20:00 – 21:00	Alex Kuzmich (Georgia Institute of Technology, Atlanta, USA) <i>"Quantum Memory, Single Photons, and Collective Dynamics Using Ultra-Cold Atoms"</i>	

Wednesday, October 24th, 2012

07:30 – 08:30	Breakfast	
08:30 – 09:00	Elena Canovi (Universität Stuttgart) <i>"DMRG study of transport in quantum dots out of equilibrium"</i>	SFB A6
09:00 – 09:30	David Peter (Universität Stuttgart) <i>"Anomalous Behavior of Spin Systems with Dipolar Interactions"</i>	SFB B8
09:30 – 10:00	Coffee break	
10:00 – 10:30	Sebastian Hofferberth (Universität Stuttgart) <i>"Excitation hopping in Rydberg networks"</i>	SFB B10
10:30 – 11:00	Alexander Muramatsu (Universität Stuttgart) <i>"Strongly correlated fermions in and out of equilibrium"</i>	SFB B4
11:00 – 11:30	Michael Jetter (Universität Stuttgart) <i>"Controlled coupling of quantum dots to photonic structures"</i>	SFB C3
11:30 – 12:00	Fedor Jelezko (Universität Ulm) <i>"Quantum coherence and photosynthetic energy transfer"</i>	SFB C11
12:00 – 14:00	Lunch	
14:00 – 15:00	Meeting of PI's (only for SFB members)	
15:00 – 15:30	Coffee break	

**CO.CO.MAT**CONTROL OF QUANTUM CORRELATIONS IN TAILORED MATTER
SFB/TRR 21 – STUTTGART, ULM, TÜBINGEN**6th Workshop 2012, Schloss Reisenburg, Günzburg
- Overview -**

Arrival (all): Sunday, 21.10.2012 (evening, get-together)
Departure (non SFB): Wednesday, 24.10.2012 (after talks)
Departure (SFB): Wednesday, 24.10.2012 (afternoon, after coffee break)

Schedule	Monday, 22.10.2012		Tuesday, 23.10.2012		Wednesday, 24.10.2012	
07:30 – 08:30	<i>Breakfast</i>					
08:30 – 09:30	R. Dumke (Nanyang Technological University, Nanyang, Singapore)		F. Ferlaino (University of Innsbruck)		E. Canovi A6	D. Peter B8
09:30 – 10:00	<i>Coffee break</i>					
10:00 – 11:00	D. Chang (ICFO, Institute of Photonic Sciences, Barcelona)	M. Plenio B11	K. Baumann (Stanford University, USA)	A. Griesmaier A2	S. Hofferberth B10	A. Muramatsu B4
11:00 – 12:00	M. Hofheinz (Grenoble)	S. Bernon C2	M. Köhl (University of Cambridge, UK)		M. Jetter C3	F. Jelezko C11
12:00 – 14:00	<i>Lunch</i>					
14:00 – 15:00	E. Kapon (EPFL Lausanne)	P. Neumann C4	J. Balewski B6 <i>(theory/experimental)</i>	T. Judd C9	Meeting of PI's (SFB intern)	
15:00 – 16:00	D. Heim A5 <i>(theory)</i>	E. Goldobin A5 <i>(experimental)</i>	J. Hecker Denschlag A8	P. Silvi A7	Coffee break: ca. 15:00 – 15:30	
16:00 – 16:30	<i>Coffee break</i>					
16:30 – 18:00	Poster		Poster			
18:00 – 20:00	<i>Dinner</i>					
20:00 – 21:00	C. Kollath (Université de Genève)		A. Kuzmich (Georgia Institute of Technology, Atlanta, USA)			

Update: 11.10.2012