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THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

GDEST EU-US Workshop on “Quantum Information and Coherence”
Munich, 7 – 9 December 2005
Max Planck Society, Administrative Headquarters

Workshop Programme (17 Speakers)

Date	Time	Event	Location
8 December	as of 8:00 a.m.	Registration	Entrance Hall
	8:50 a.m.	Workshop Opening	Conference room
Entanglement chaired by S. Popescu	9:00 – 9:40 a.m.	Caves <i>Physical Resources, Entanglement, and the power of quantum computation</i>	
	9:40 – 10:20 a.m.	Zeilinger <i>All-optical quantum computation and quantum communication</i>	
	10:20 – 10:50 a.m.	Break	Cafeteria
Atoms chaired by S. Girvin	10:50 – 11:30 a.m.	Brune <i>Mesoscopic quantum coherences with Rydberg atoms and cavities</i>	
	11:30 – 12:10 p.m.	Rempe <i>Quantum Information and Coherence in Cavity Quantum Electrodynamics</i>	
	12:10 – 12:50 p.m.	Porto <i>Controlling atom interactions in Optical Lattices</i>	
	12:50 – 2:00 p.m.	Light Business Lunch	Cafeteria
	2:00 – 3.30 p.m.	Poster Session	MPI for Intellectual Property

Conference Office: Britta Dembinski, Max Planck Society
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Theory chaired by C. Caves	3:30 – 4:10 p.m.	Zoller <i>Quantum information processing with polar molecules</i>	
	4:10 – 4:50 p.m.	Lloyd <i>Quantum limits to the measurement of space and time</i>	
	4:50 – 5:20 p.m.	Break	Cafeteria
Super- Conductors chaired by R. Gross	5:20 – 6:00 p.m.	Girvin <i>Cavity QED with electrical circuits</i>	
	6:00 – 6:40 p.m.	Siddiqi <i>Innovations in microwave readout techniques for superconducting qubits</i>	
	7:30 p.m.	Welcome Dinner for all participants (on invitation of MPG)	Platzl Hotel, “Platzl-Stube” Sparkassenstr. 10, 80331 München
9 December			
Quantum dots chaired by D. Loss	9:00 – 9:40 a.m.	Imamoglu <i>Quantum optics with quantum dots</i>	
	9:40 – 10:20 a.m.	Finley <i>Charge and spin excitations in semiconductor quantum dots and molecules</i>	
	10:20 – 10:50 a.m.	Break	Cafeteria
Ions chaired by P. Zoller	10:50 – 11:30 a.m.	Häffner <i>Quantum computation with trapped ions</i>	
	11:30 – 12:10 a.m.	Leibfried <i>A Large scale quantum computer based on trapped Ions</i>	
	12:10 – 1:30 p.m.	Light Business Lunch	Cafeteria

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	1:30 – 3:00 p.m.	Poster Session	MPI for Intellectual Property
Spins chaired by A. Imamoglu	3:00 – 3:40 p.m.	Loss <i>Electron spin decoherence in single and double quantum dots</i>	
	3:40 – 4:20 p.m.	Marcus <i>Using electron spin as a holder of quantum Information</i>	
	4:20 – 4:50 p.m.	Break	Cafeteria
Fundamentals chaired by S. Lloyd*	4:50 – 5:30 p.m.	Popescu <i>Entanglement and the foundations of statistical mechanics</i>	
	5:30 – 6:10 p.m.	Bennett <i>Entanglement and communication</i>	
	6:10 – 6:50 p.m.	Panel Discussion	Conference room
	7:00 p.m.	Farewell Reception for all participants (on invitation by NAS)	East Hall