

CeNS Winterschool (Mauterndorf) 21.-25 February 2005 NanoScience: From Quantum Bits to Life Science



	Sunday 20.02.05	Monday 21.02.05	Tuesday, 22.02.05	Wednesday, 23.02.05	Thursday 24.02.05	Friday 25.02.05
8:45		Introduction				
9:00- 9:50	9.00h-13.00h Internal CeNS-Seminar for PhD-Students	Quantum computing with single ions <i>C. Becher</i> Innsbruck	Functionalized nanoparticles <i>L.Manna</i> Lecce	Tuning the optics of a quantum dot with a voltage <i>R. J. Warburton</i> Edinburgh	Molecular Recognition, Templates, and Self- Assembly: The Role of Spatial Arrangement <i>C. A. Schalley</i> Bonn	Microtubule-based motor systems: From Cellular Function to Bionanotechnology <i>S. Diez</i> MPI Dresden
9:50 -10:40	(Burg Mauterndorf) Coffee break: 10.45h-11.00h	Optics & quantum- optics of nanostructured surfaces <i>J.J. Greffet</i> Paris	Manipulating nanoliters - surface acoustic wave fluidics <i>C.Gauer</i> Munich	Organic electronics <i>G.Malliaras</i> Cornell U.	Quantum Noise and Quantum Measurement in Mesoscopic Physics <i>A. Clerk</i> Yale	Measurements of non- Gaussian shot noise <i>B. Reulet</i> Yale
10:40 11:10		Break coffee/tea	Break coffee/tea	Break coffee/tea	Break coffee/tea	Break coffee/tea
11:10- 12:00		Biomolecular hybrid structures <i>M. Mertig</i> Dresden	Use of Magnetic Tweezers and AFM to study nucleic acids and the motors that work on them <i>N. Dekker</i> Delft	Electron tomography <i>F. Förster</i> Munich	Tip-enhanced optical nano-spectroscopy <i>T. Taubner</i> Munich	High-frequency shot noise measurement of a quantum point contact: noise- assisted tunneling in a quantum dot <i>U. Hartmann</i> Munich
12:00- 17:00		Lunch & informal discussions	Lunch & informal discussions	Lunch & informal discussions	Lunch & informal discussions	Lunch & informal discussions
17:00h		Break coffee/tea	Break coffee/tea	Break coffee/tea	Break coffee/tea	Break coffee/tea
17:15- 18:15		Shot noise in nanostructures <i>Y. Blanter</i> Delft	Quantum optics experiments with quantum dots <i>J. M. Gérard</i> Grenoble	Molecular Machines in the repair of DNA double-strand breaks <i>K-P. Hopfner</i> Munich	Using Self-Assembly to create electronic materials <i>C. Nuckolls</i> Columbia U.	Atomic force microscopy and its progress in spatial resolution <i>F. Giessibl</i> Augsburg
18:15 - 19:15		Posters (open end)	In-situ Comparison of Electron Tunneling through Different Self- Assembled Monolayers by Nanografting and Conductive Tip AFM <i>G. Scoles</i> Princeton & Trieste	Posters (open end)	Atomic Scale Analysis of Magnetic Doping Atoms and Self- Assembled III/V Semiconductor Nanostructures <i>P. Koenraad</i> Eindhoven	From 19.00h on Farewell party (open end)