

HUMO

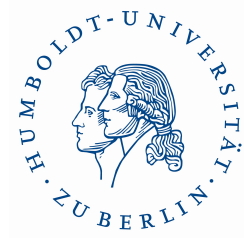
Humboldt Centre for Modern Optics

Workshop

13 – 14 April 2010
Berlin Adlershof



Max-Born-Institut



Location:

Erwin Schrödinger-Zentrum, 12489 Berlin-Adlershof,
Rudower Chaussee 26, Room 0'100

Program

Tuesday, April 13

	Timing	Speaker	Title
0.	09.45 – 9.50	F. Henneberger HU Berlin	Welcome

Session on **“Crystalline high finesse mirrors and optical resonators”**

Chair: A. Peters

	Timing	Speaker	Title
0.	09.50 – 10.00	A. Peters HU Berlin	Introduction
1.	10.00 – 10.35	M. Aspelmeyer Universität Wien	Macroscopic tests of quantum mechanics with optomechanical resonators
2.	10.35 – 11.10	T. Kessler PTB Braunschweig	A cryogenic monocrystalline silicon cavity for reducing the noise floor of ultrastable lasers
3.	11.10 – 11.45	M. Weyers FBH Berlin	High-finesse AlGaAs Bragg Mirrors

→ Lunch

Session on **“Session on Quantum Excitations as Nanoprobes”**

Chair: O. Benson

	Timing	Speaker	Title
1.	13.00 – 13.35	Dr. Lucio Robledo TU Delft NL	Controlling single spins and single photons in diamond
2.	13.35 – 14.10	Christoph Lienau Carl von Ossietzky University Oldenburg	Linear and nonlinear optics of hybrid metal-semiconductor nanostructures: Towards amplifiers for surface plasmon polaritons
3.	14.10 – 14.45	Oliver Benson Institute of Physics Humboldt University Berlin	Defect centers in nanodiamond as „portable“ single photon emitters and nanoprobes

→ Coffee Break

Conference Room: Gerthsen-Hörsaal, Newtonstr. 15:

	Timing	Speaker	Title
4.	15.15 – 17.00	Atac Imamoglu ETH Zurich CH	Resonant optical manipulation of quantum dot electron and nuclear spins

→ Come together

Wednesday, April 14

Session on "**Challenges in ZnO Optoelectronics**"

Chair: F. Henneberger

	Timing	Speaker	Title
1.	09.00 – 09.35	Takafumi Yao Tohoku University Sendai	Growth of high-quality p-type ZnO layers by co-doping of N and Te
2.	09.35 – 10.10	Bruno Meyer Univ. Gießen	ZnO and p-type doping: a comparison between theory and experiment
3.	10.10 – 10.45	Sylke Blumstengel Institute of Physics Humboldt University Berlin	ZnO: An excellent candidate for all-epitaxial inorganic/organic hybrid hetero- and nanostructures

→ Coffee Break

Chair: R. Fornari

	Timing	Speaker	Title
4.	11.00 – 11.35	Guy Feuillet CEA-LETI Grenoble	LETI efforts towards p-type doping in ZnO nanowires and substrates
5.	11.35 – 12.10	Andreas Waag Braunschweig University of Technology	ZnO nanostructures: properties and potential applications
6.	12.10 – 12.45	Marius Grundmann University Leipzig	P-doped nanowires

→ Lab visits

