

## Please watch out for program change concerning poster sessions as updated on February 26, 2007!!

### International Winterschool on "Electronic Properties of Novel Materials: Molecular Nanostructures" Kirchberg/Tirol 10.03.2007 - 17.3. 2007

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#### Tentative program

##### SA 10.03. Evening

17:00 Check in for IWEPM2007

21:00 Welcome, with Bürgermeister of Kirchberg

##### SU 11.03. Morning: Quantum Information, Spin Resonance

08:30 MEHRING (DE,60)

[Principles of quantum computing](#)

09:30 ARDAVAN (UK,30)

[Manipulation of quantum information in N@C60](#)

10:00 Coffee break

10:30 HARNEIT (DE,30)

[Progress in N@C60 quantum computing](#)

11:00 SIMON (HU,30)

[Magnetic resonance in carbon nanotubes](#)

11:30 CORZILIUS (DE,30),

[Probing the electronic properties of bulk samples SWNT by resonant and non-resonant microwave absorption](#)

##### Afternoon: Miniworkshops

17:00-18:30 Dinner

##### Evening: Optics & Spectroscopy

18:30 HEINZ (US,30)

[Optical spectroscopy of individual single-walled carbon nanotubes](#)

19:00 CAPAZ (BR,30)

[Excitons in carbon nanotubes: insights from model calculations](#)

19:30 MARUYAMA (JP,30),

[Growth and optical properties of small-bundled vertically aligned single-walled carbon nanotubes](#)

20:00 WOLF (DE,30)

[Electron-phonon interaction in low-dimensional solids probed with time-resolved spectroscopy](#)

##### MO 12.03. Morning: Functionalization

08:30 LEE (KR,30)

[Tailoring electronic structures of carbon nanotubes](#)

09:00 BURGHARD (DE,30)

[Electrochemically functionalized carbon nanotubes](#)

09:30 SCALIA (DE,30)

[Carbon nanotubes in liquid crystals as versatile, functional materials](#)

10:00 Coffee break

10:30 ENDO (JP,30),

[Chemical doping effect on double walled carbon nanotubes](#)

11:00 ZETTL (US,30)

Thermal and electromechanical studies of nanotubes  
11:30 HENNRICH (DE,30)  
Separation techniques for single-walled carbon nanotubes

**Afternoon: Miniworkshops**

17:00-18:30 Dinner

**Evening : Raman**

18:30 MAULTZSCH (US,30)  
Fano lineshape in the high-energy modes of metallic carbon nanotubes  
19:00 POPOV (BG,30)  
Theoretical Raman intensity of the RBM of SWCNTs  
19:30 SAUVAJOL (FR,30),  
Raman spectroscopy of well-identified single-walled carbon nanotubes  
20:00 DOORN (US,30),  
Raman studies of exciton-phonon coupling in single walled carbon nanotubes: quantitation of bundled vs. isolated behavior  
20:30 JORIO (BR,30)  
The importance of excitons for the intensity of the radial breathing mode and the disorder induced band in single wall carbon nanotubes

**TU 13.03. Morning: Nanowires**

08:30 SAMUELSON (SE,60)  
Growth, properties and applications of semiconductor nanowires  
09:30 W. WEBER (DE,30)  
Silicon nanowire transistors with axially intruded nickel silicide contacts  
10:00 Coffee break  
10:30 PRINZ (RU,30),  
Molecularly and atomically thin semiconductor and carbon nanoshells  
11:00 BAKKERS (NL,30)  
VLS nanowire growth dynamics  
11:30 PATTERSON (IR,30),  
Role of materials in emerging nanoelectronic devices

**Afternoon: Miniworkshops**

17:00-18:30 Dinner

**Evening: Applications**

18:30 GRUNER (US,30)  
Carbon for printed electronics  
19:00 BAUGHMAN (US,30)  
From Electrical to Fuel Powered Artificial Muscles  
19:30 VOETZ (DE,30),  
Industrial production of multiwalled carbon nanotubes

**Welcome address of Hotel by Dr. Taus, poster reading, Poster sp**

**WE 14.03. Morning: Graphene & Graphite**

08:30 NOVOSELOV (UK,60),  
QED in a pencil trace  
09:30 McCANN (UK,30)  
Asymmetry gap in the electronic band structure of bilayer graphene  
10:00 Coffee break  
10:30 ROTENBERG (US,30)  
The spectral function of monolayer graphene films  
11:00 JARILLO-HERRERO (US,30)

11:30 [Transport Measurements in Graphene](#)  
MORPURGO (NL,30)  
[Bipolar Supercurrent in Graphene](#)

**Afternoon: Miniworkshops**

17:00-18:30 Dinner

**Evening: Graphene & Graphite**

18:30 FERRARI (UK,30)

[Raman spectroscopy of pristine and doped graphene](#)

19:00 LAZZERI (FR,30),

[Non-adiabatic Kohn-anomaly in a doped graphene monolayer](#)

19:30 GRUENEIS (DE,30)

[Low energy electronic structure of graphite by angle resolved photoemission spectroscopy](#)

**Poster ptu**

**TH 15.03. Morning: Nanotube Growth**

08:30 HOFMANN (US,30)

[In-situ observations of catalyst dynamics during surface-bound carbon nanotube nucleation](#)

09:00 IIJIMA (JP,30)

[Science and technology of single-walled carbon nanotubes](#)

09:30 GEOHEGAN (US,30)

[In situ time-resolved measurements of carbon nanotube and nanohorn growth](#)

10:00 Coffee Break

10:30 PFEIFFER (AT,30),

[Growth mechanisms of innershell tubes in double-walled carbon nanotubes](#)

11:00 KATAURA (JP,30)

[Filling up metallic valley on photoluminescence map by organic Molecules encapsulated in single-wall carbon nanotubes](#)

11:30 CALAME (NL,30)

[From individual molecular junctions to networks](#)

**Afternoon: Miniworkshops**

17:00-18:30 Dinner

**Evening: Noncarbon Nanotubes**

18:30 LOISEAU (FR,30)

[Luminescence properties of boron nitride nanotubes](#)

19:00 RUBIO-SECADES (ES,30)

[Optical properties of graphite, h-BN and nanotubes: coherent excitations](#)

19:30 GADERMAIER (SI,30),

[Equilibrium and non-equilibrium optical properties of MoSI nanowires](#)

**Poster pth**

**FR 16.3. Morning: Transport**

08:30 APPENZELLER (US,30)

[Carbon nanotube field-effect transistors as tunneling devices](#)

09:00 CHEN (US,30)

[Graphene ribbon electronics](#)

09:30 RAQUET (FR,30),

[Aharonov-Bohm conductance modulation in ballistic carbon nanotubes](#)

10:00 Coffee break

10:30 KAISER (NS,30)

[Changes in electronic transport in carbon nanotube networks with thickness and chemical treatment](#)

11:00 VD ZANT (NL,30)

- Coupling electronic transport to vibrational modes in suspended nanotube resonators  
11 :30 CLEUZIOU (FR,30)  
Carbon nanotube superconducting quantum interference device

**Afternoon: Miniworkshops**

**Evening: Nanomaterials**

- 17:00 H. WEBER (DE,30)  
Charge transport across single-molecule junctions  
17:30 FILORAMO (,30),  
Self-assembly of carbon nanotubes by bio-directed approach  
18:00 RICHERT (DE,30),  
DNA-carbon nanotube interactions and nanostructuring based on DNA  
18:30 PICHLER (DE,30)  
Summary  
20:30 **Bauernbuffet, fare well**

**SA 17.3. Departure**

Update 02.03..2007