Friday, April 12
[Chair: K. Richter]
09.00-09.35  T. Markussen (TU of Denmark/Lyngby)
Quantum interference and thermopower in molecular junctions

09.35-10.10  N. Marzari (EPFL Lausanne)
Characterizing and engineering electrical and thermal transport in carbon nanostructures from first-principles

10.10-10.45  C. Nuckolls (Columbia University/New York)
Making electronic materials from nanocarbon

Coffee break

[J. Eroms]
11.05-11.40  G. Steele (Delft University of Technology)
Spin-orbit coupling, supercurrents, and nanomechanics in clean suspended nanotubes

11.40-12.15  C. Stampfer (RWTH Aachen)
Probing relaxation times in graphene quantum dots

12.15-12.50  C. Schönenberger (University of Basel)
Ballistic interference in ultraclean suspended graphene

12.50-13.25  Conclusion

Lunch & Departure

International Workshop on “Building blocks for carbon-based electronics: From molecules to nanotubes“

Conference Program

April 10-12, 2013

Vielberth-Building, University of Regensburg
Wednesday, April 10

08.00-08.50  Registration / Opening [Chair: M. Grifoni]

[C. Strunk] 09.00-09.35  J. Nygård (NBI Copenhagen)
Carbon-based platforms for molecular electronics and quantum dot spin physics

09.35-10.10  T. Kontos (LPA Paris)
Carbon nanotube based quantum dot circuits in microwave cavities

10.10-10.45  J. Paaske (NBI Copenhagen)
Bias-spectroscopy of spin states in carbon nanotubes and molecules

Coffee break

[J. Lupton] 11.05-11.40  R. Saito (Tohoku University)
Gate modulated Raman spectroscopy of graphene and carbon nanotubes

11.40-12.15  R. Hillenbrand (CIC nanoGUNE)
Real-space mapping of infrared plasmons in graphene

12.15-12.50  F. Wang (University of California/Berkeley)
Optical spectroscopy of individual carbon nanotubes

Lunch break

[M. Marganska] 14.00-15.00  J.M. van Ruitenbeek (Leiden University)
Public Talk: Electron transport across single organic molecules

15.00-15.35  L. Venkataraman (Columbia University/New York)
Structure and electronics of single molecule circuits

15.35-16.10  A. Donarini (University of Regensburg)
Many-body interference in STM single molecule junctions on thin insulating films

Coffee break

[T. Niehaus] 16.30-17.05  V. Deshpande (University of Utah)
Thermodynamic self-measurement in an atomically thin electro-magneto-mechanical device

17.05-17.40  P. Collins (University of California/Irvine)
Single molecule enzymology using carbon nanotube circuits

17.40-18.15  S. Louie (University of California/Berkeley)
Electronic and transport properties of molecular junctions and graphene nanostructures

Poster session

Thursday, April 11

[Chair: D. Weiss] 09.00-09.35  A. Bachtold (ICFO Barcelona)
Mechanical resonators made from nanotubes and graphene

09.35-10.10  A. Hüttel (University of Regensburg)
Spin-orbit interaction and Kondo correlations in ultra-clean carbon nanotubes

10.10-10.45  M. Sassetti (Genova University)
Transport properties in carbon nanotube quantum dots coupled to mechanical vibrations

Coffee break

[U. Repp] 11.05-11.40  R. Berndt (CAU Kiel)
A surface science approach to molecular conductance

11.40-12.15  K. Franke (FU Berlin)
Manipulation of magnetic properties of single molecules on surfaces

12.15-12.50  H. Weber (Friedrich-Alexander University/Erlangen-Nuremberg)
Charge transport in single-molecule junctions: vibrations and magnetic degrees of freedom

Lunch break

[U. Weymouth] 14.00-14.35  H.S.J. van der Zant (Delft University of Technology)
Exploiting intrinsic molecular features for nanoscale electronics

14.35-15.10  W. Wernsdorfer (Institut Néel/Grenoble)
Molecular quantum spintronics OR: MQS using single-molecule magnets

15.10-15.45  K. Müllen (MPIP Mainz)
Synthesizing electronic device properties

Coffee break

[C. Schüller] 16.05-16.40  G. Cuniberti (TU Dresden)
A bottom-up route to enhance thermoelectric figures of merit in graphene nanoribbons

16.40-17.15  D. Natelson (Rice Quantum Institute/Houston)
Molecule-scale Raman as a tool: Bias-driven shifts of C60 vibrational levels

17.15-17.50  S. Reich (FU Berlin)
Plasmon-enhanced light scattering in graphene and carbon nanotubes

18.45-20.00  Guided tour of Regensburg (invited speakers; dpt.: Hotel Roter Hahn)

20.00 – x  Conference dinner at Bischofshof (city center)