

Workshop Contact:

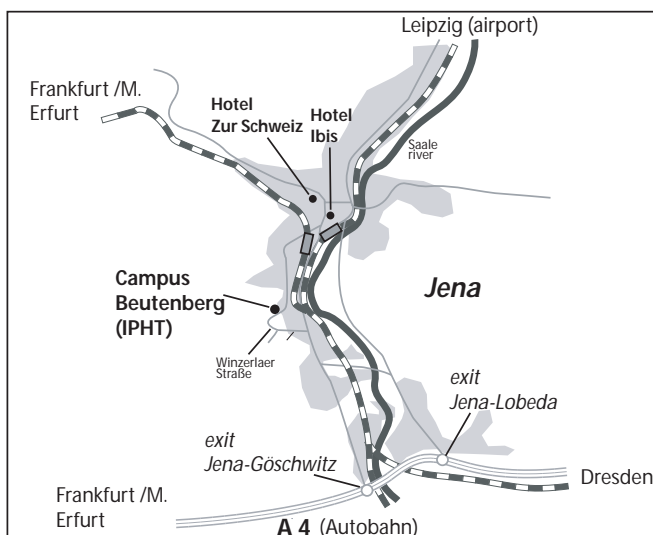
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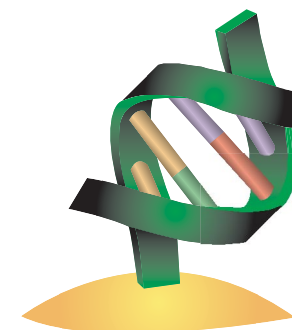
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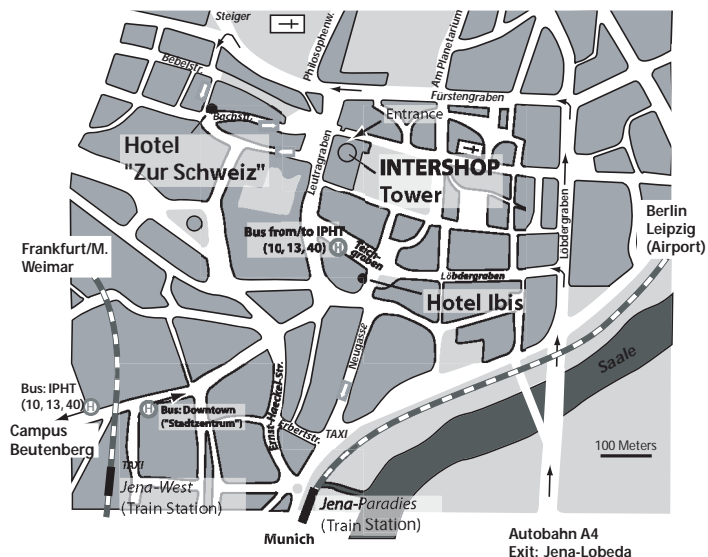
DNA-based molecular construction



International Workshop
Jena (Germany)
May 23-25, 2002
Organizer: Wolfgang Fritzsche



Jena Downtown



Transfer Downtown <-> IPHT

Bus stops: "Stadtzentrum" <-> "Campus Beutenberg"
Bus lines: 10, 13, 40

Campus Beutenberg



Program

Thursday, May 23

19:30 Get-together
(Scala Restaurant- Intershop Tower, Downtown)

Friday, May 24

- 09:00 Opening
(IPHT at the Campus Beutenberg)
- 09:10 **N. Seeman** (New York University)
DNA Nanotechnology
- 09:35 **C. Dekker** (Delft University)
Single-Molecule Electronics, from Carbon Nanotubes to DNA
- 10:00 **M. Taniguchi** (Osaka University)
Development of electronic devices based on DNA
- 10:25 ---- coffee break ----
- 11:00 **W. Fritzsche** (IPHT Jena)
A construction scheme for a SET device based on self-assembly of DNA and nanoparticles
- 11:25 **C. Keating** (Penn State University)
DNA-directed assembly of metal nanowires
- 11:50 **K. Williams** (Delft University)
DNA-mediated Self-Assembly of Nanodevices
- 12:15 ---- lunch break ----
- 13:30 **M. Washizu** (Kyoto University)
Molecular Manipulation of DNA and Its Applications
- 13:55 **F. Bier** (Fraunhofer Inst. Potsdam)
Nanometer addressable lateral surface structuring by use of nucleic acids
- 14:20 **O. Harnack** (Sony Stuttgart)
Self-Assembly Driven Fabrication of Metallised DNA Nanowires and Their Electrical Properties
- 14:45 ---- coffee break ----
- 15:15 **M. Mertig** (University Dresden)
(Single molecule experiments with DNA)
- 15:40 **S. Diez** (MPI Dresden)
Handling and Manipulation of single DNA-molecules by Kinesin driven microtubules
- 16:05 **C. Niemeyer** (University Bremen)
Semisynth. DNA-Protein Conjugates: Synthesis, Characterization and Applications in NanoBiotechnology

(Friday, May 24)

- 16:30 Poster Session
- K. El-Salam** (Agricuilt. Res.Center, Egypt)
Effect of Gel Matrices on Characterization of F. oxysp. and F. oxysp. f.sp vasainvectum by RAPD Analysis
- L. Franca** (Munich University)
The Combination Of AFM And Laser-Based Microdissection As A Tool For Molecular Biology
- L. Lie** (Newcastle University)
On-chip solid phase DNA synthesis on semiconductor
- R. Möller** (IPHT Jena)
Surface-immobilized DNA constructs probed by electrical resistivity
- S. Patole** (Newcastle University)
DNA synthesis on silicon: An STM study
- A. Sondermann** (IPHT Jena)
Assembly of G-quartet based DNA superstructures (G-wires)
- G.-J. Zhang** (IPHT Jena)
Studies of an optical detection of DNA constructs based on nanoparticles and silver enhancement
- G. Zuccheri** (University Bologna)
A Direct Measure of the Ergodicity of the Small-Scale Dynamics of DNA
- 17:00 Excursion
- 18:30 *Thuringian Bratwurst - Dinner*

Saturday, May 25

- 08:30 **B. Samori** (Bologna University)
Recognition of the DNA sequence by an inorganic crystal surface
- 08:55 **A. Pike** (Newcastle University)
Integrating DNA With Semiconductor Materials
- 09:20 **J. Burmeister** (Bayer AG)
SNP Analysis by Direct Electrical Detection
- 09:45 **P. Nielsen** (Copenhagen University)
Structure and Recognition Properties of Peptide Nucleic Acids
- 10:10 **G. von Kiedrowski** (University Bochum)
Nanobots - just science fiction?
- 10:35 ---- coffee break ----
- 11:00 **J. Vesenka** (College of New England)
Construction and Examination of "G-wire" DNA
- 11:25 **P. de Wolf** (Veeco Instruments)
Scanning Probe Microscopes for Imaging and Manipulation of DNA
- 11:50 **M. Guthold** (Wake Forest University)
Novel Methodology to identify single aptamer molecules
- 12:15 **A. Woolley** (Brigham Young University)
DNA Alignment, Characterization and Nanofabrication on Surfaces
- 12:40 End of the scientific program
- 12:45 Lunch