

Poster Contributions

- A. C.saki (IPHT Jena)
Fabrication and characterization of nanophotonic metal structures
- F. Garwe (JenLab GmbH)
Laser-based sequence-specific DNA processing with sub-wavelength precision using DNA-nanoparticle conjugates
- A. Steinbrück (IPHT Jena)
Preparation and optical characterization of core-shell bi-metal nanoparticle
- J. Wagner (TU Ilmenau)
Interactions of Gold Nanoparticles with Pollutants detected through Plasmon Band Changes
- J. Yang (Nat. Univ. Singapore)
A Phase Transfer Identification of Core-Shell Structure in Bimetallic Nanoparticles

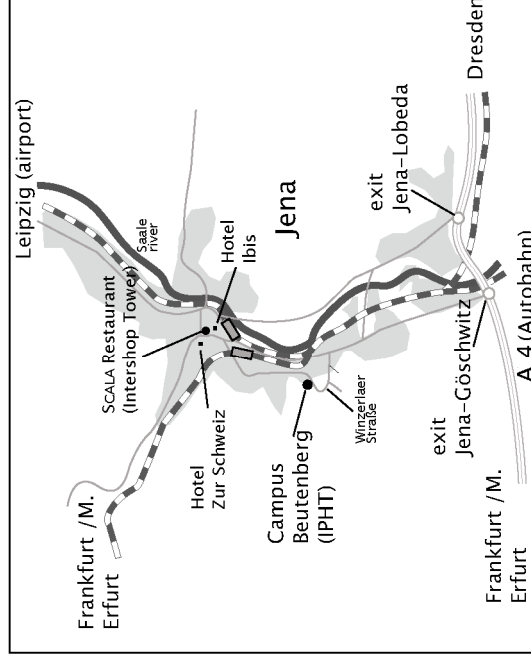
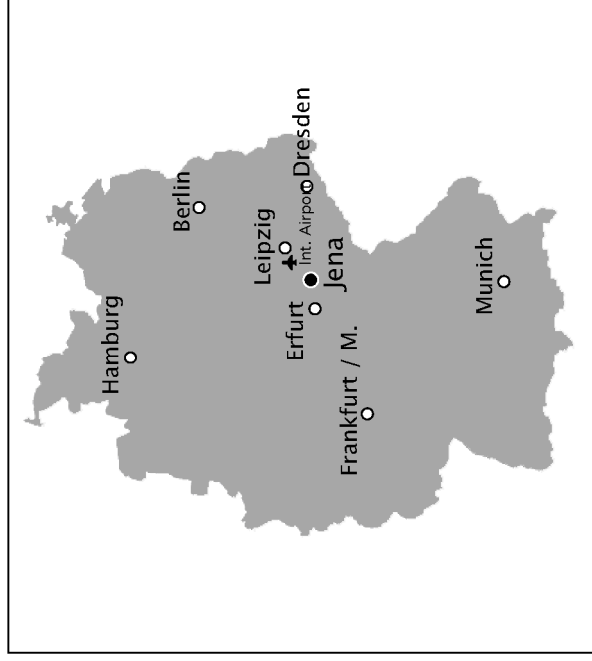
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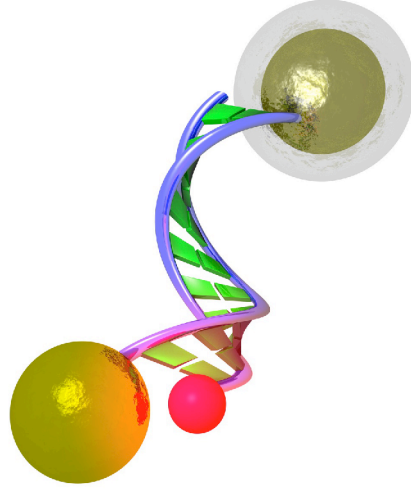
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Molecular Plasmonics

International Symposium



Jena (Germany)

May 19-21, 2005

Organizer: Wolfgang Fritzsche



Program

Thursday, May 19

19:30 Get-together : Ernst Abbe lecture & Buffet
(Scala Restaurant, 28th floor of Intershop tower,
5 minutes walk from Hotels IBIS, see downtown map)

Friday, May 20

08:15 Pick-up from Hotel IBIS (please meet at front desk)

08:30 Registration

09:00 Opening
(IPHT at the Campus Beutenberg)

Gold Nanostructures (W. Fritzsche)

09:10 **R. Van Duyne** (Northwestern Univ.)
*Molecular Plasmonics: Origins, Fundamentals,
and Sensor Applications*

09:45 **C. Keating** (Penn State Univ.)
Striped metal nanowires: optical properties and applications

10:10 **P. Mulvaney** (Melbourne)
*Optical Properties Of Gold Nanorods: Orientation Effects
And Mechanical Oscillations*

10:35 **U. Rehn** (MPI Halle)
*Interactions and morphology of DNA-linked
gold nanoparticle networks*

----- coffee break / posters -----

Application of Plasmonic Effects (J. Lakowicz)

11:30 **W. Fritzsche** (Jena)
*DNA-based nanoparticle plasmonics for a highly parallel
and integrated molecular nanotechnology*

11:55 **G. Hüttmann** (Lübeck)
*Application of Laser irradiated gold nanoparticles for selective
protein knock out, cell permeabilisation, and cell killing*

12:20 **T. Ruckstuhl** (Dublin)
*Enhancement of Fluorescence-based Biosensors based on
Localized Surface Plasmon Resonance (LSPR)*

----- lunch break / posters -----

Single Particle Studies (P. Mulvaney)

14:00 **C. Sönnichsen** (Berkeley)
*Metal nanoparticles as molecular rulers and orientation
sensor for single molecule biophysics*

14:25 **P. Johansson** (Univ. Orebro)
*Surface-enhanced Resonance Raman Scattering (SERRS)
and fluorescence near metal nanoparticles*

14:50 **S. Kühn** (ETH Zurich)
*Influencing a single fluorescent molecule with
a single metallic nanoparticle*

----- coffee break / posters -----

Metal Nanostructure Arrays (C. Keating)

15:30 **D. P. Tsai** (Taipei)

Plasmonic Nanophotonics For Ultrahigh Density Nano-Storage

15:55 **M. W. Docter** (Delft)
*3D Mid-Field Microscope: Future Application Of Extraordinary
Trans-Mission Through Subwavelength Hole-Arrays*

16:20 **J. Coe** (Ohio State University)
*Subwavelength Apertures for Enhanced IR Absorption Spectra
of Complex Molecular Assemblies*

----- coffee break / posters -----

17:00 Orchid Excursion

19:00 Thuringian Bratwurst – Dinner (IPHT)

Saturday, May 21

Raman Spectroscopy (R. Van Duyne)

09:00 **P. Rösch** (Jena University)

*Application of different SERS substrates for the
investigation of biological samples*

09:25 **K. Kneipp** (Harvard)

*Optical Probes for Biological Applications Based on Surface
Enhanced Raman Scattering on Gold Nanoparticles*

09:50 **M. Raschke** (MPI Berlin)

Tip-enhanced single molecule Raman spectroscopy

10:15 **R. Dickson** (Georgia Tech)

*Novel Fluorescent and Raman-Active Noble Metal
Quantum Dots*

----- coffee break -----

Fluorescence and Metal Nanostructures (R. Dickson)

11:00 **B. Barnes** (Exeter Univ.)

Surface plasmon mediated fluorescence

11:25 **J. Lakowicz** (Baltimore)

*Metallic Nanostructures for High Sensitivity
Fluorescence Detection*

11:50 **J. Enderlein** (Jülich)

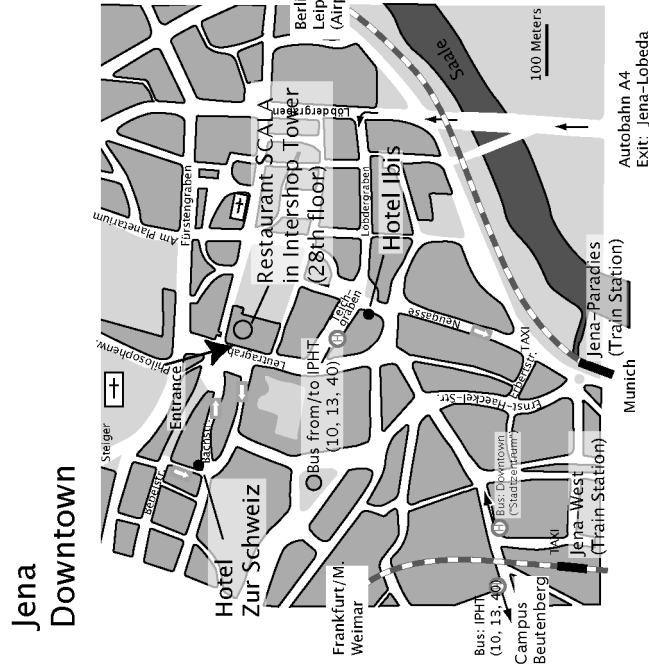
*Fluorescence radiation engineering with
metallic nanocavities*

12:15 **M. Kreiter** (MPI Mainz)

Dyes and optical antenna

appr. 12:40 End of the scientific program

13:00 Lunch



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

