



Stanford/IBM Center for Probing the Nanoscale
An NSF Nanoscale Science and Engineering Center

2nd Annual Workshop Program
Friday, May 5, 2006

Bechtel Conference Center, Encina Hall, 616 Serra Mall, Stanford University

- 8:15 – 8:55 **Continental Breakfast and Registration**
- 8:55 - 9:00 **Professor Kathryn Moler, Welcome and opening remarks**
- 9:00 – 9:30 **Professor Dan Dahlberg, University of Minnesota**
Magnetism at the Nanoscale: A Voyeur's Tale
- 9:30 – 10:00 **Professor Roland Wiesendanger, University of Hamburg**
Mapping Spin Structures on the Atomic Scale
- 10:00 – 10:20 **Coffee Break**
- 10:20 - 10:50 **Dr. Sergei Magonov, Veeco Instruments, Santa Barbara**
Atomic Force Microscopy of Soft Matter: From High-resolution Imaging to Quantitative Studies of Local Mechanical Properties
- 10:50 - 11:20 **Dr. H. Kumar Wickramasinghe, IBM Almaden Research Center**
Molecular Sorting with an AFM
- 11:20 - 11:50 **Dr. Andreas Heinrich, IBM Almaden Research Center**
Probing Spin Coupling in Engineered Atomic Structures
- 11:50 - 1:45 **Lunch**
- 12:30 - 1:30 **Lab Tours (optional) – Prof. David Goldhaber-Gordon**
- 1:30 - 1:45 **Return from Lab Tours**
- 1:45 - 2:15 **Professor Zhi-Xun Shen, Stanford University**
Developing the Next Generation Scanning Microwave Imager
- 2:15 – 2:45 **Professor Eric Heller**
Imaging Electron Flow in 2DEGs With and Without Magnetic Fields
- 2:45 – 3:15 **Professor Pat Collier**
Functionalized Nanoelectrode Scanning Probes Using Carbon Nanotubes
- 3:15 – 3:45 **Professor Michael F. Crommie, Univ. of California, Berkeley**
Exploring and Manipulating Fullerenes at the Single Molecule Level
- 3:45 – 4:00 **Break**
- 4:00 – 6:00 **Poster Session and hors d'oeuvres**