

Lecture Program

I. Surface magnetism on atomic scale

1. Prof. Vladimir N. Petrov

(State Polytechnical University, S. Petersburg, Russia)

Electron spectroscopy of spin states on surface



2. Dr. Jan-Hugo Dil

(University of Zurich, Institute of Physics, Switzerland)

Spin-resolved ARPES research at the Swiss Light Source



3. Prof. Alexander M. Shikin

(State University, S. Petersburg, Russia)

Spin-dependent phenomena in quantum systems

4. Dr. Liudmila Dzemiantsova

(University of Hamburg, Institute of Applied Physics, Germany)

Atomic-scale magnetism by SP-STM

II. Surface chemistry on atomic scale

5. Dr. Sergey Levchenko

(Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Germany)

Theoretical study of chemical surface reactions

6. Dr. Niklas Nilius

(Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Germany)

Studying model systems in heterogeneous catalysis with STM

7. Prof. Klaus Wandelt

(University of Bonn, Germany; Institute of Experimental Physics, Wroclaw, Poland)

Electrochemical scanning tunneling microscopy

8. Prof. Geoff Thornton

(University College London, United Kingdom)

Structure and reactivity of TiO₂ surfaces

9. Prof. Peter Zeppenfeld

(Johannes Kepler University Linz, Institute of Experimental Physics, Austria)

Optical spectroscopy and microscopy of surfaces and thin films

III. Single atoms and molecules on surfaces



10. Dr. Boris V. Andryushechkin

(Prokhorov General Physics Institute RAS, Moscow, Russia)

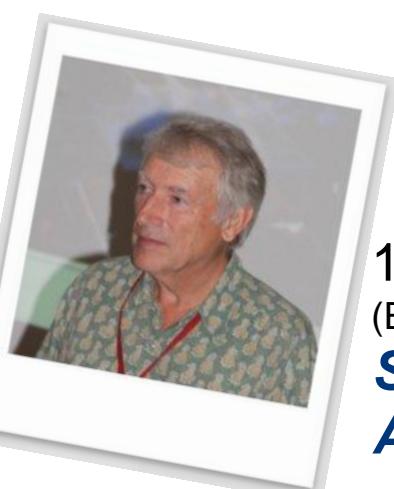
Chemisorbed atom interactions at extremely low coverage



11. Prof. Alexander A. Saranin

(Institute for Automation and Control Processes FEB RAS, Vladivostok, Russia)

Atom and molecular dynamics on silicon surface



12. Prof. Wolf-Dieter Schneider

(École Polytechnique Fédérale de Lausanne, Switzerland)

***Spectroscopic manifestations of low-dimensional physics:
A local view***

IV. Superconducting and strong-correlation systems

13. Prof. Dimitri Roditchev

(University Paris 06, Institute of Nanoscience, France)

Quantum phenomena in strongly confined superconductors



14. Prof. Shuji Hasegawa

(University of Tokyo, Department of Physics, Japan)

Surface nanomaterials: low-dimensional, spin-split, and superconducting



15. Prof. Giorgio Rossi

(INFM, TASC National Lab., Trieste, Italy)

Use of FERMI@Elettra FEL source to study fast processes on surfaces



16. Prof. Anatoly K. Zvezdin

(Prokhorov General Physics Institute RAS, Moscow, Russia)

Femtosecond magnetism and plasmonics

V. Low dimensional systems including nanocarbons

17. Prof. Markus Morgenstern

(University RWTH-Aachen, Germany)

***STM/STS on 2D systems in semiconductors.
Graphene quantum dots***



18. Prof. Elena D. Obraztsova

(Prokhorov General Physics Institute RAS, Moscow, Russia)

***Optical properties of 1D carbon systems:
doped nanotubes and graphene ribbons.***



VI. Quantum communications

19. Dr. Konstantin S. Kravtsov

(Prokhorov General Physics Institute RAS, Moscow, Russia)

Ultra-fast signal treatment for optical communications