

INVITED SPEAKERS

| | |
|----------------|----------------|
| M. NEKOVEE | A. BARÓ |
| L. SECO | C. LORTHOIR |
| A. MASCARAQUE | J. DOBSON |
| A. ROBIN | W. SCHATTKE |
| E. ROHRER | M. VAN HOVE |
| J. INGLESFIELD | A. LUCAS |
| J.J. QUINN | D. MENZEL |
| P. FORREST | A. CORREIA |
| H. WINTER | N.H. MARCH |
| J.M. GARCÍA | M. RIVAS |
| M.A. CAZALILLA | N.H. MARCH |
| J.M. BLETRY | J.A. ALONSO |
| G. DE STASIO | J.I. LATORRE |
| A. LIEBSCH | R. MONIOT |
| E. ZAREMBA | R. BARRERA |
| W. PLUMMER | E. ORTEGA |
| H. PETEK | L. FETTERS |
| J. CARLSSON | M.S. GRAVIELLE |
| B. HELLSING | A. MUGARZA |
| N. YAMAMOTO | A. LIEBSCH |
| | S.G. LOUIE |
| | M.A. CAZALILLA |
| | P. FEIBELMAN |
| | E. GROSS |
| | P.A. ZEIJLMANS |
| | M.A. CAZALILLA |
| | B. GUMHALTER |
| | J. BLÉTRY |
| | F. SOLS |
| | E. KRASOVSKII |

2000

2001

THE SEMINARS AT DIPC

ACCLAIMED AUTHORITIES
IN THE FIELD
GIVE A LEADING EDGE

Formal presentations of leading edge research lines in physics, with full historical perspective, as well as overall scientific and social overviews are a key element for the education of research scientists and students alike. DIPC offers a full program of seminars by acclaimed authorities in the field. ■

2000

JANUARY 19, 2000

Quantum Monte Carlo Analysis of Exchange and Correlation in the Strongly Inhomogeneous Electron Gas

M. Nekovee (Queen Mary College, London, UK)

FEBRUARY 18, 2000

Financial risk management in non-gaussian markets

L. Seco (Toronto University, Canada)

APRIL 7, 2000

Pb/Ge(111) and Sn/Ge(111) interphases: structure, electronic properties and phase-transition

A. Mascaraque (LURE, Orsay, Paris, France)

APRIL 14, 2000

Energy loss investigations for N⁺ ions scattered off a Pt(110) surface under grazing incidence

A. Robin (Universität Osnabrück, Germany)

APRIL 27, 2000

Small is beautiful and powerful

E. Rohrer (IBM Laboratory, Zurich, Switzerland)

MAY 12, 2000

Friedel oscillations around subsurface impurities on GaAs(110)

J. Inglesfield (University of Cardiff, UK)

MAY 19, 2000

Composite Fermions in Quantum Hall systems: Generalization to a Multicomponent Fermion Plasma

J. J. Quinn (University of Tennessee, USA)

MAY 23, 2000

All is time: the Discrete Geometroynamics Program

P. Forrest (University of New South Wales, Australia)

MAY 26, 2000

Effect of the projected band gap in Cu(111) on charge transfer in ion-surface scattering

H. Winter (Humboldt Universität, Berlin, Germany)

JUNE 5, 2000

Self-assembled nanostructure fabrication by Molecular Beam Epitaxy for optoelectronic applications: Quantum Dots, Quantum Rings and Quantum wires

J. M. Garcia (Instituto de Microelectrónica de Madrid, CNM-CSIC, Spain)

JUNE 14, 2000

Why 'one dimensional' is different

M. A. Cazalilla (Brown University, Rhode Island, USA)

JUNE 26, 2000

The glass transition in tetrahedric compounds

J. M. Bletry (INST, CEA, Grenoble, France)

JUNE 30, 2000

Synchrotron Spectromicroscopy: how medicine, biology and physics can benefit from a physics technique

G. De Stasio (University of Wisconsin, USA)

JULY 6, 2000

Quantum well behaviour without confining barrier revealed via dynamic screening in thin alkali metal films

A. Liebsch (FZ-Jülich, Germany)

JULY 11, 2000

Dynamics of Bose-condensed trapped atomic gases

E. Zaremba (Queen's University, Canada)

SEPTEMBER 4, 2000

The dynamical role of defects in 2D phase transitions: from charge density waves to defect density waves

W. Plummer (University of Tennessee, USA)

SEPTEMBER 4, 2000

Ultrafast two-phonon photoemission studies of the alkali atom dynamics on noble metal surfaces

H. Petek (Advanced Research Laboratory, Hitachi Ltd, Japan and University of Pittsburg, USA)

SEPTEMBER 15, 2000

Electronic structure of bulk and polar surfaces of ZnO

J. Carlsson (Chalmers University, Sweden)

SEPTEMBER 18, 2000

Electron-Phonon Coupling; some historical aspects and lifetimes

B. Hellsing (Chalmers University, Sweden)

DECEMBER 19, 2000

Photon emission from silver particles induced by high energy electrons

N. Yamamoto (Tokyo Institute of Technology, Japan)

2001

JANUARY 18, 2001

Conductivity in nanowires

A. Baró (Universidad Autónoma de Madrid, Spain)

MARCH 21, 2001

Local order and dynamics in confined polymers: the case of block copolymers

C. Lorthioir (Laboratoire de Physique de Solides. Université Paris-Sud, France)

APRIL 3, 2001

Van der Waals forces and time dependent density functional theory

J. Dobson (Griffith University, Australia)

MAY 3, 2001

Electronic structure from photoemission (ARUPS): tools, accuracy, and new materials

W. Schattke (Universität Kiel, Germany)

MAY 3, 2001

Holography with photoelectrons

M. Van Hove (Lawrence Berkeley National Laboratory, California, USA)

MAY 7, 2001

From what is Light to what is Life: an account of how X-rays cracked the structure of DNA

A. Lucas (Fundp Namur, Belgium)

MAY 9, 2001

Heisenberg and the Uranium Club under Nazi Germany

A. Lucas (Fundp Namur, Belgium)

MAY 23, 2001

Ultrafast charge transfer at surfaces from core spectroscopies

D. Menzel (Teshnische Universität München, Germany)

MAY 25, 2001

PHANTOMS: Nanotechnology Network for Information Processing and Storage

A. Correia (CMP Cientifica S.L., Las Rozas, Madrid, Spain)

MAY 29, 2001

Quantal Wigner electron solids with and without magnetic fields

N. H. March (Universiteit Antwerpen, Belgium)

JUNE 4, 2001

Kinematical Theory of Spinning Particles: Classical and Quantum Mechanical Formalism of Elementary Particles

M. Rivas (Universidad del País Vasco / Euskal Herriko Unibertsitatea, Spain)

JUNE 5, 2001

Electron correlation in atoms, molecules and condensed phases

N. H. March (Universiteit Antwerpen, Belgium)

JUNE 8, 2001

Electronic shell effects in metallic clusters and their consequences for cluster self-assembling

J. A. Alonso (Universidad de Valladolid, Spain)

JUNE 18, 2001

Computación cuántica: Estados cuanticos

J. I. Latorre (Universitat de Barcelona, Spain)

JUNE 18, 2001

Computación cuántica: Entanglement

J. I. Latorre (Universitat de Barcelona, Spain)

JUNE 19, 2001

Computación cuántica: Teleportación

J. I. Latorre (Universitat de Barcelona, Spain)

JUNE 19, 2001

Computación cuántica: Encriptación cuántica

J. I. Latorre (Universitat de Barcelona, Spain)

JULY 2, 2001

Ethical Issues of the Desktop Metaphor

R. Moniot (Fordham University, New York, USA)

JULY 3, 2001

Does an effective index of refraction in granular matter always exist?

R. Barrera (Universidad Autónoma de México, Mexico)

JULY 6, 2001

Electronic states at step superlattices

E. Ortega (Universidad del País Vasco / Euskal Herriko Unibertsitatea, Spain)

JULY 9, 2001

The Packing Length. A Basis for Melt State Rheological Parameters

L. Fetters (Jülich IFF, Germany)

JULY 24, 2001

Energy and electron spectra after ion-surface collisions

M. S. Gravielle (Universidad Nacional de Buenos Aires, Argentina)

JULY 25, 2001

Lifetime of surface states confined on terraces of a vicinal Au (111) surface

A. Mugarza (Universidad del País Vasco / Euskal Herriko Unibertsitatea, Spain)

JULY 26, 2001

Do plasmons live longer than electron-hole pairs?

A. Liebsch (FZ-Jülich, Germany)

JULY 27, 2001

Optical properties of materials

S.G. Louie (University of California, Berkeley, USA)

AUGUST 3, 2001

The Kondo effects in quantum dots

M.A. Cazalilla (Brown University, Rhode Island, USA)

AUGUST 8, 2001

Time dependant phenomena in quantum dots

M.A. Cazalilla (Brown University, Rhode Island, USA)

SEPTEMBER 5, 2001

How water wets metal surfaces

P. Feibelman (Sandia National Laboratory, Albuquerque, New Mexico, USA)

SEPTEMBER 6, 2001

Atoms and molecules in strong lases pulses: simulations far from equilibrium

E. Gross (Physikalisches Institut der Universität Würzburg, Germany)

SEPTEMBER 24, 2001

Interactions of Metastable He atoms with single crystals surface

P.A. Zeijlmans (Debye Institue, Utrecht University, Netherlands)

SEPTEMBER 28, 2001

Junction of two Luttinger liquids out of equilibrium: a time-dependent DMRG study

M.A. Cazalilla (Brown University, Rhode Island, USA)

NOVEMBER 14, 2001

**Quantum model of heat transfer in inelastic atom-surface scattering:
comparsion of theory with experiment**

B. Gumhalter (Institute of Physics of the University of Zagreb, Croatia)

NOVEMBER 26, 2001

Historia de las técnicas y de las investigaciones de los vidrios"

J. Blétry (Commissariat a l'Énergie Atomique (CEA), INSTN, Grenoble, France)

DECEMBER 4, 2001

Condensación de Bose-Einstein"

F. Solís (Universidad Autónoma de Madrid, Spain)

DECEMBER 21, 2001

Spectroscopy of bulk and semi-infinite crystals by the Extended LAPW-kp method

E. Krasovskii (Institute for Theoretical Physics Christian-Albrechts-University Kiel, Germany)