

Visiting Researchers

Long visits

Dr. Duncan Mowbray

Center for Atomicscale Materials Design,
Technical University of Denmark, Lyngby, Denmark
01/01/2012–Present
Time-resolved oxyde mediated photocatalisis.

Dr. Vitaly Golovach

CNRS Grenoble, France
01/11/2012–31/10/2017
Electronic properties at the nanoscale.

Dr. Ziya Aliyev

Baku State University, Azerbaijan
01/12/2013–28/05/2014, 02/10–30/12/2014
Materials physics of topological insulators.

Prof. Istvan Nagy

Technical University of Budapest, Hungary
03/01–01/02/2014
Various aspects of correlations in extended fermionic systems; spin-fluctuation, pair-correlation, one-particle damping, impurity-screening.

Prof. Godfrey Gumbs

Hunter College, The City University of New York, USA
07/01–07/02/2014
Plasmons in nanostructures.

Prof. Giorgio Benedek

Università degli Studi di Milano-Bicocca, Milan, Italy
09/01–28/02/2014, 09/09–01/11/2014
Surface phonons and phase transitions.

Dr. Nikolai Zaitcev

Philipps- Universität Marburg, Germany
24/01–04/04/2014
First principle electronic structure calculations of organic molecules absorbed on metallic surfaces.

Prof. Norman March

University of Antwerpen, Belgium
04/02–04/04/2014
Study of the role of exchange and correlation effects in both ground state density functional theory as well as excitation within time-dependent density-functional theory.

Dr. Bruce Milne

Centre for Computational Physics,
University of Coimbra, Coimbra, Portugal
08/02–08/05/2014, 03/11–12/12/2014
Theoretical spectroscopy of the light harvesting complex from green plants.

Prof. Joseph R. Manson

Clemson University, Clemson, South Carolina, USA
12/02–17/03/2014, 02/10–12/11/2014
Theoretical studies of structure and dynamics of microscopic surfaces.

Prof. Vladimir Nazarov

Research Center for Applied Sciences,
Academia Sinica, Taipei, Taiwan
21/02–21/03/2014
Time-dependent density-functional theory of
particle-solid interactions.

Prof. Roman O. Kuzian

National Academy of Sciences of Ukraine,
Kiev, Ukraine
01/03–30/04/2014, 01/11–23/12/2014
Photoemission from strongly correlated systems.

Prof. Giovanni Vignale

University of Missouri, Columbia, Missouri, USA
10/04/201420/06/2014
Condensed matter theory.

Dr. Mathias Ljunberg

Laboratoire ondes et matière d'Aquitaine (LOMA) -
CNRS, Talence, France
16/04/201416/04/2016
First principles calculations of complex oxides.

Prof. Alexander Protogenov

Institute of Applied Physics of Russian Academy of
Sciences, Nizhnii Novgorod, Russia
01/05/201431/05/2014
Transport properties of 3D topological insulators.

Prof. Peter Saalfrank

Institut für Chemie, Universität Postdam,
Postdam-Golm, Germany
02/05/201431/07/2014
Elastic, inelastic, and reactive scattering of atoms and
molecules from surfaces.

Francesco Ferrari (PhD Student)

Università Milano Bicocca, Milan, Italy
05/05/201430/11/2014
GW calculation of a molecule adsorbed on a titanium
dioxide substrate.

Dr. Marisa Faraggi

Instituto de Astronomía y Física del Espacio IAFE
(CONICET-UBA) Ciudad Autónoma de Buenos Aires,
Argentina
12/05–11/07/2014
Study of electronic dynamics on transitions metals
dichalcogenides (TMDC) and modelling of
2D metal-organic networks on metallic surfaces.

Dr. Sergey Eremeev

Institute of Strength Physics and Materials Sciences,
Tomsk, Russia
01/06–29/08/2014
Electronic properties of topological insulators.

Prof. Vladimir Menshov

Russian Research Center "Kurchatov Institute",
Moscow, Russia
02/06–31/08/2014
Magnetic impurities in digital alloys and topological
insulators.

Prof. Juan Faustino Aguilera Granja

UASLP, Universidad Autónoma San Luis Potosí,
México
03/06–31/07/2014, 15/12–15/01/2015
Nanostructure materials.

Marcos Dominguez Rivera (PhD Student)

Università di Trieste and CNR-IOM, Italy
09/06–01/08/2014
Structural and electronic coupling of organics poly
and heteroaromatic molecules on inorganic surfaces
of oxides and metals.

Prof. Jon Marcaide Osoro

Universidad de Valencia, Burjassot, Spain
16/06–11/09/2014
Radio astronomy.

Prof. Eugene Kogan

Bar-Ilan University, Ramat-Gan, Israel
16/06–23/07/2014
Electronic properties of graphene.

Prof. Luis Alberto Montero Cabrera

Facultad de Química, Universidad de la Habana, Cuba
20/06–20/07/2014
Molecular modeling of excited electronic states of
nanoscopic systems.

Prof. Nikolay Kabachnik

Institut für Experimentalphysik, Hamburg, Germany
01/07–30/09/2014
Study of Auger processes in gases and at solid
surfaces within an attosecond streaking scheme.

Prof. Andrey Borisov

Université Paris Sud, France
01/07–31/08/2014
Time dependent density functional theory calcula-
tions to address the optical response of plasmonic
systems.

Prof. Francisco Guinea Lopez

Instituto de Ciencia Materiales de Madrid-CSIC,
Madrid, Spain
01/07–31/07/2014
Condensed matter physics.

Dr. Zakaria Abd El-Fattah

Faculty of Science, Al-Azhar University, Cairo, Egypt
01/07–30/09/2014
Angle resolved photoemission experiments in
metallic nanostructures.

Dr. Marisol Alcántara Ortigoza

University of Central Florida, Orlando, Florida, USA
02/07–31/08/2014
Optical and electronic properties of transition-metal
dichalcogenides.

Dr. Miguel Angel Cazalilla

National University of Singapore
15/07–15/08/2014
Strongly correlated systems, Bose Condensates,
mesoscopic and low-dimensional systems in and
out of equilibrium. Electronic excitations in surfaces
and anisotropic systems.

Prof. Włodzimierz Jaskólski

Institute of Physics Nicholas Copernicus University,
Torun, Poland
20/07–30/09/2014
Study of quantum dot arrays and nanotube superlat-
tices.

Kaiqiang Lin (PhD Student)

Xiamen University, Xiamen, Fujian Province, China
21/07–27/08/2014
Relation between near-field and far-field information
in surface enhanced Raman spectroscopy and
photoluminescence of single gold nanorod.

Prof. Vladimir Kuznetsov

Tomsk State University, Tomsk, Russia
01/08–31/08/2014
Density functional methods in the theory of phase
diagrams of alloys and in the Kondo effects.

Prof. Jeremy Baumberg

University of Cambridge, United Kingdom
01/08/201431/08/2014
Nanophotonics, optical nanoantennas, plasmonics,
field enhanced spectroscopy, sers, seira, optics of
tunneling configurations, plasmon excitations in
stem, quantum dots, hybrid systems, near field
optical microscopy, optoelectronics, quantum optics.

Dr. Vito Despoja

University of Zagreb, Croatia
01/08–30/09/2014
Plasmonics of intercalated monolayer and bilayer
graphene.

Prof. Viktor Tugushev

National Research Center "Kurchatov Institute",
Moscow, Russia
04/08–31/10/2014
Magnetism in superlattices and spintronics.

Dr. Peng Zhang

University of Science and Technology of China,
Hefei, Anhui, China
18/08–13/01/2015
Morphokinetics: Morphology-based modeling of the
growth kinetics of 2D materials.

Dr. Rafael Grande Aztatzi

Cinvestav, Centro de Investigación y Estudios
Avanzados del Instituto Politécnico Nacional, México
28/08–31/12/2016
Computational approach to aluminum biochemistry:
al-phosphorylated polypeptide interactions.

Prof. Wolfgang Schattke

Universität Kiel, Germany
01/09–13/11/2014
Variational Quantum Montecarlo calculations of the
electronic properties of solids and surfaces. Theory
of photoemission in semiconductors and metals.

Dr. Tatiana Menshchikova

State University of Tomsk, Russia
01/09–28/11/2014
Excitations on surfaces with defects.

Prof. Vladlen Zhukov

Ural Branch of the Russian Academy of Sciences,
Ekaterinburg, Russia
01/09–28/11/2014

Electron dynamics in oxides: electron-electron and electron-phonon mechanisms of decay of excited electrons.

Dr. Igor Rusinov

State University of Tomsk, Russia
01/09–28/11/2014

Excitations on surfaces with defects.

Prof. Marijan Sunjic

University of Zagreb, Croatia
03/09–30/10/2014

Dynamical response and surface excitations in thin films.

Prof. Amand Lucas

FUNDP, Namur, Belgium
04/09–31/10/2014

Condensed matter physics, surface sciences, electronic and atomic structures of reduced dimensionality systems structural biology.

Romain Dupuis

CEMES/CNRS, Toulouse, France
08/09–09/12/2014

Cements and nanoadditions.

Dr. José Sarga Diaz

Petroleos de Venezuela S.A. PDVSA-INTEVEP,
Venezuela
15/09–12/12/2014

Cements under pressure and temperature.

Dr. Carlos Echeverria Arrondo

Facultad de Ciencia y Tecnología, UPV/EHU, Bilbao,
Spain
15/09–28/02/2015

Calculations on magnetic properties for ZnO nanoparticles.

Prof. Raffaele Resta

Università di Trieste, Trieste, Italy
12/10–16/12/2014

Computational modelling of materials physics.

Dr. Chang-Jin Lee

KITECH, Korea Institute for Industrial Technology,
Cheonan, Republic of Korea
15/10–15/12/2014

Electronic excitations and many-body effects in solids, surfaces, and nanostructures.

Prof. Julio A. Alonso Martín

Universidad de Valladolid, Spain
20/10–20/11/2014

Electronic structure of carbon-based materials.

Iker Gallardo Arrieta (PhD Student)

Facultad de Ciencia y Tecnología, UPV/EHU,
Bilbao, Spain
20/10–20/01/2015

Systematic study of electronic and magnetic properties of metal-organic coordination networks and the effects of strain on its systems.

Dr. Yury Koroteev

Tomsk State University, Russia
23/10–21/12/2014

First principles calculations of the electronic structure.

Dr. Hector Ochoa de Eguileor

Instituto Ciencia Materiales de Madrid, CSIC
03/11–28/02/2015

Two-dimensional materials. Spin-orbit coupling (topology, spintronics).

Short visits**Prof. Juan Faustino Aguilera Granja**

UASLP, Universidad Autónoma San Luis Potosí,
México

02/01–16/01/2014, 20/04–27/04/2014

Nanostructure materials.

Prof. Larry Glasser

Clarkson University, Potsdam, New York, USA
12/01–18/01/2014

Mathematical physics applied to condensed matter.

Dr. Iñigo Liberal Olleta

Universidad Pública de Navarra, Pamplona, Spain
21/01–21/01/2014

Optical forces produced by localized sources.

Prof. Iñigo Ederri Urzainqui

Universidad Pública de Navarra, Pamplona, Spain
21/01–21/01/2014

Optical forces produced by localized sources.

Dr. Dario Bercioux

Dahlem Center for Complex Quantum Systems,
Freie Universitaet Berlin, Germany

22/01–26/01/2014, 17/08–25/08/2014

Quantum transport in low dimensional systems.

Dr. Marta Pelc

Instituto de Ciencia de Materiales, CSIC, Madrid,
Spain

25/01–16/02/2014

Graphene and carbon nanotubes.

Prof. Jean-Pierre Luminet

Observatoire de Paris, LUTH, Meudon, France
30/01–30/01/2014

Recent developments in black holes physics and astrophysics.

Prof. Gaspar Armeltes

Instituto de Microelectrónica de Madrid, IMM (CNM-
CSIC), Madrid, Spain

05/02–06/02/2014

Magnetoplasmonics.

Dr. Victor Morales Florez

Universidad de Sevilla, Spain
05/02–07/02/2014

C-S-H gel cements.

Prof. Andreas Otto

Universität Düsseldorf, Germany
16/02–23/02/2014, 26/03–04/04/2014

Raman spectroscopy.

Dr. Luca Bergamini

Università di Modena e Reggio Emilia, Modena, Italy
19/02–22/02/2014

Plasmonic properties of metal-nanoparticles interacting with molecules.

Prof. Salvador Miret Artes

Instituto de Física Fundamental, CSIC, Madrid, Spain
24/02–27/02/2014, 14/10–16/10/2014
Theory of surface diffusion.

Prof. Andreu Mas Colell

Consejero de Economía y Conocimiento,
Gobierno de Cataluña, Spain
28/02–02/03/2014
Impulsando la investigación.

Prof. Marijan Sunjic

University of Zagreb, Croatia
03/03–28/03/2014
Dynamical response and surface excitations in thin films.

Dr. Diego Peña Gil

Universidad de Santiago de Compostela, Spain
06/03–07/03/2014
Building nanographenes by organic synthesis in solution.

Dr. Emanuele Maggio

University of Warwick, Coventry, United Kingdom
06/03–07/03/2014
Theory of dye sensitised solar cells

Prof. John Inglesfield

University of Wales Cardiff, United Kingdom
07/03–04/04/2014
Embedding in photonics and plasmon bands in metallic nanostructures.

Dr. Kenta Kuroda

Hiroshima Jogakuin University, Hiroshima, Japan
15/03–19/03/2014
Photoemission measurements of electronic structure of topological insulators.

Prof. Akio Kimura

Hiroshima Jogakuin University, Hiroshima, Japan
16/03–19/03/2014
Photoemission measurements of electronic structure of topological insulators.

Lucia Ortega Álvarez (PhD Student)

Instituto de Ciencia y Tecnología de Polimeros, CSIC,
Madrid, Spain
20/03–21/03/2014
Synthesis and characterization of rubber nanocompounds with shape memory.

Dr. Geza Giedke

Max-Planck-Institut für Quantenoptik, Garching,
Germany
26/03–29/03/2014
Quantum Information and Quantum Optics: Implementations of QIP in atomic and solid-state systems.

Prof. Gustav Bihlmayer

IFF-FZ, Forschungszentrum Jülich, Germany
07/04–10/04/2014
Magnetism in low dimensions: Overlayers, wires and atoms.

Dr. François Konschelle

Institute for Quantum Information, Physikzentrum,
RWTH Aachen, Germany
14/04–15/04/2014
Transport equations for superconductors in the presence of spin interaction.

Prof. Jürg Osterwalder

University of Zurich, Switzerland
15/04–17/04/2014
Functionalities from corrugated hexagonal boron nitride monolayers.

Dr. Rodrigo Humberto Aguilera del Toro

UASLP, Universidad Autónoma San Luis Potosí, México
20/04–23/04/2014
Nanostructure materials.

Dr. Florian Eich

University of Missouri, Columbia, Missouri, USA
22/04–16/05/2014
Condensed matter physics

Prof. Nobuhiko Azuma

Nagaoka University of Technology, Nagaoka, Japan
30/04–30/04/2014
The molecular structure of ice grain boundaries and its role in the dynamics of polar ice sheets.

Prof. Markus Hennrich

Institute for Experimental Physics,
University of Innsbruck, Austria
03/05–06/05/2014
Quantum optics and spectroscopy.

Prof. Valery Tyuterev

Tomsk State Pedagogical University, Tomsk, Russia
04/05–31/05/2014
Phonons and electron dynamics in solids.

Prof. José Angel Martin Gago

Centro de Física de Materiales de Madrid, ICMM-
CSIC, Madrid, Spain
08/05–10/05/2014
Nanoscience for studying the cosmos.
(A ERC-synergy grant for interdisciplinary science).

Prof. Remi Carminati

Institut Langevin, ESPCI ParisTech, France
11/05–14/05/2014
Statistics of single molecule fluorescence lifetimes in random media.

Prof. Aristide Dogariu

CREOL, University of Central Florida, USA
11/05–14/05/2014
Optical Forces.

Prof. M. Verónica Ganduglia Pirovano

Instituto de Catálisis y Petroquímica, CSIC, Madrid,
Spain
12/05–14/05/2014
Cerium oxide surfaces reducibility and catalytic function: the role of electron localization.
A theoretical perspective.

Prof. Luisa Bausa

Instituto de Ciencia de Materiales Nicolas Cabrera,
Universidad Autónoma de Madrid, Spain
13/05–13/05/2014
Effects of the interaction between localized surface plasmons and rare-earth ion based solid-state gain media.

Prof. Georgios Floudas

University of Ioannina, Greece
19/05–22/05/2014
Physics of soft matter.

Guillaume Vasseur (PhD Student)

Institut Jean Lamour, Université de Lorraine-CNRS,
France
19/05–19/05/2014
One dimensional pi-conjugated band dispersion in polymeric chains.

Prof. Michaela Zimmermann

Max Planck Intitut, International Division Society,
München, Germany
20/05–21/05/2014
Scientific communication, Max-Planck-Gesellschaft,
Measures for international cooperation

Dr. Dietrich Foerster

CPMOH/LOMA Université de Bordeaux, France
20/05–21/05/2014, 28/05–29/05/2014
Test of new decomposition of Bloch's orbital products.

Dr. Saber Guedidda

IPCMS - Département Magnétisme des Objets
NanoStructurés (DMONS), Strasbourg, France
20/05–21/05/2014
Molécules donneur-accepteur auto-assemblées pour la conversion photovoltaïque.

Prof. Kenneth S. Schweizer

University of Illinois at Urbana-Champaign,
Illinois, USA
21/05–24/05/2014
Particle diffusion, topological entanglements and slow macromolecular dynamics in polymer nano-composites.

Prof. Frank Scheffold

Fribourg University, Switzerland
25/05–27/05/2014
Light scattering in colloidal suspensions and complex media.

Dr. Lorenzo Sponza

Institut des NanoSciences de Paris, INSP, France
28/05–29/05/2014
Damping, satellites and multiple excitations in oxides and nanostructures: efficient theoretical and numerical approaches towards a dynamical many-body theory.

Dr. Deung-Jang Choi

Max Planck Institute for the Structure and Dynamics of Matter, Hamburg, Germany
29/05–01/06/2014
Composite magnetic systems created by atom manipulation.

Prof. Pere Alemany Cahner

Universitat de Barcelona, Barcelona
09/06–15/06/2014
How do you measure the symmetry of a molecule?

Dr. Héctor Vázquez Melis

Institute of Physics, Academy of Sciences of the Czech Republic, Prague, Czech Republic
09/06–12/06/2014
Modelling single molecule circuits.

Prof. Vladimir Chaldyshev

Ioffe Physico-Technical Institute, St. Petersburg, Russia
24/06–06/07/2014
Plasmonic on base of GaAs materials

Dr. Jens Brede

Institute of Applied Physics and Interdisciplinary Nanoscience Center, Hamburg, Germany
25/06–27/06/2014, 05/10–17/10/2014
Long-range magnetic coupling between nanoscale organic-metal hybrids mediated by a nanoskyrmion lattice.

Prof. Francisco José Garcia Vidal

Facultad de Ciencias, Universidad Autónoma de Madrid, Spain
01/07–29/07/2014
Plasmonics.

Dr. Francesca Balleto

King's College London, United Kingdom
01/07–01/07/2014
Unravelling morphologies and chemical ordering at the nanoscale.

Prof. Jorge E. Hirsch

Universidad de California, San Diego, California, USA
03/07–07/07/2014
Dynamic Hubbard model, high temperature superconductivity and the Meissner effect.

Dr. Marco Bernabei

Universidad de Barcelona
06/07–08/07/2014
Structure and dynamics of ring polymers.

Marina K Kuimova (PhD Student)

Imperial College London, UK
11/07–11/07/2014
Mapping microscopic viscosity using molecular rotors

Romain Dupuis (PhD Student)

CEMES/CNRS, Toulouse, France
16/07–18/07/2014
Cements and nanoadditions.

Prof. Pablo Ordejón Rontomé

Centre d'Investigació en Nanociència i Nanotecnologia (CSIC-ICN), Bellaterra, Barcelona, Spain
17/07–20/07/2014
Electronic transport in chemically modified and in amorphous graphite

Prof. Otto Muskens

University of Southampton, United Kingdom
22/07–25/07/2014
Plasmonic with novel material

Prof. Stefan Maier

Imperial College London, United Kingdom
23/07–27/07/2014
Plasmonics for sensing.

Dr. Mathieu Juan

University Macquarie, Sydney, Australia
23/07–25/07/2014
Optical forces: a link between classical and quantum mechanics.

Prof. Ulrich Höfer

Philipps-Universität Marburg, Germany
24/07/2014–23/08/2014, 07/11–08/11/2014
Resonance hopping on surfaces of simple metals.

Alessandro Romito (PhD Student)

Freie Universität Berlin, Germany
04/08/2014–06/08/2014
A scattering matrix topological index for interacting fermions in one-dimensional superconductors.

Dr. Javier Gorosabel Urkia

Instituto de Astrofísica de Andalucía, CSIC, Granada, Spain
04/08/2014–06/08/2014
Astronomical instrumentation: a window of opportunities.

Antonio Garcia Garcia (PhD Student)

University of Cambridge, United Kingdom and IFT, Universidade de Lisboa, Portugal
06/08–08/08/2014
Enhancing bulk superconductivity by engineering granular materials.

Prof. Ortwin Hess

Imperial College London, United Kingdom
17/08–21/08/2014
Nanophotonics in gain media.

Prof. Jochen Feldman

Lehrstuhl für Photonik und Optoelektronik, Ludwig-Maximilians-Universität München, München, Germany
18/08–23/08/2014
Nanoplasmonics.

Dr. Luca Chirolli

Instituto de Ciencia de Materiales de Madrid CSIC-Madrid, Spain
21/08–24/08/2014
Transport properties of graphene.

Prof. Teunis Klapwijk

University of Delft, Holland
23/08–30/08/2014
Non-equilibrium properties of superconducting nanohybrids.

Dr. Benjamin W. Heinrich

Institut für Experimentalphysik, Freie Universität Berlin, Germany
26/08–26/08/2014
Magnetism of molecules on metal and superconducting surfaces.

Dr. Ewa Golas

Universidad de Gdansk, Poland
03/09–06/09/2014
Computer simulations of bio-inspired soft nanoparticles.

Antonio Correia (PhD Student)

Phantoms Foundation, Madrid, Spain
05/09–12/09/2014
Development of research networks.

Prof. José Manuel Hermida Ramón

Universidad de Vigo
12/09–12/09/2014
A combined quantum chemical/statistical mechanical method to simulate solvated systems in ground and excited state.

Prof. Archie Howie

University of Cambridge, United Kingdom
16/09–30/09/2014
Theory of valence electron excitations by fast electrons.

Prof. Jorge Kohanoff

Queen's University Belfast, Ireland
16/09–21/09/2014
Electronic structure calculation and ab initio molecular dynamic.

Prof. Christian Klinke

Institute of Physical Chemistry, University of Hamburg, Germany
17/09–21/09/2014
Two-dimensional colloidal nanostructures: synthesis and electrical transport.

Dr. Johan Gustafson

Div. of Synchrotron Radiation Research, Lund University, Sweden
17/09–19/09/2014
Seeing is believing - Novel in situ techniques for studies of model catalysts.

Dr. Leonor Chico Gómez

Instituto de Ciencia de Materiales de Madrid (ICMM),
Spain
18/09–26/09/2014
Electronic structure calculations in graphene.

Prof. Cagla Meral

Middle East Technical University, Ankara, Turkey
18/09–27/09/2014
Hydration water in cement like materials.

Nick Papior Andersen (PhD Student)

DTU Nanotech, Technical University of Denmark,
Lyngby, Denmark
21/09–20/10/2014
Methodology and efficient implementation of
quantum transport theory in the TranSIESTA code.

Dr. Andrea Donarini

Institute of Theoretical Physics, University of
Regensburg, Germany
25/09–27/09/2014
Transport characteristics of complex interacting
nano-junctions.

Prof. Magnus Paulsson

Linnaeus University, Kalmar, Sweden
25/09–27/09/2014
Theoretical description of electron transport in
nanoscale junctions.

Prof. Claude Cohen-Tannoudji

Laboratoire Kastler Brossel, Paris, France
30/09–03/10/2014
The dressed atom approach for describing
atom-photon interactions.

Prof. Juan Ignacio Cirac

Max-Planck-Institut für Quantenoptik,
Garching, Germany
01/10–03/10/2014
Quantum physics and computation

Dr. Antonio Politano

Università degli Studi della Calabria, Trieste, Italy
05/10–31/10/2014
Adsorption, electronic properties and collective
excitations (phonons, plasmons) in thin metal films
and graphen.

Prof. Friedhelm Bechstedt

Friedrich-Schiller-Universität Jena, Institut für
Festkörpertheorie und –optik, Jena Germany
05/10–18/10/2014
Many body perturbation theory applied to novel 2D
materials, optical and energy loss spectroscopy.

Prof. Annemarie Pucci

Ruprecht Karls University of Heidelberg, Germany
06/10–05/11/2014
Infrared spectroscopy.

Prof. Manuel Aguilar Benitez De Lugo

CIEMAT
13/10–16/10/2014
Fundamental physics on the international space
station.

Dr. Holger L. Meyerheim

Max-Planck-Institut für Mikrostrukturphysik,
Halle, Germany
13/10–15/10/2014
Structure analysis of clean and adsorbate covered
Bi₂Se₃ using x-ray diffraction and x-ray absorption
spectroscopy.

Ariane Koek

CERN, Meyrin, Canton de Genève, Switzerland
14/10–16/10/2014
Artists' Research Programmes.

Prof. Luis Alvarez Gaumé

CERN, Geneva, Switzerland
14/10–16/10/2014
Deconstructing mass.

Prof. Norbert Kroo

Wigner Physics Research Center of the Hungarian
Academy of Sciences, Budapest, Hungary
18/10–22/10/2014
Some surface plasmon assisted nonlinear anomalies
in a gold film at room temperature.

Prof. Peter Racz

Wigner Physics Research Center of the Hungarian
Academy of Sciences, Budapest, Hungary
18/10–21/10/2014
Plasmonics, notably plasmon condensation.

Prof. Dilgam Taghiyev

Institute of Catalysis and Inorganic Chemistry,
Azerbaijan National Academy of Sciences,
Baku, Azerbaijan
16/11–23/11/2014
Topological materials.

Dr. Magali Lingenfelder

Max Planck-EPFL Laboratory for Molecular Nanoscience
EPFL, Lausanne, Switzerland
27/11–28/11/2014
A molecular interactions? roadmap to 2D functional
nanostructures.

Prof. Alexander Protopenov

Institute of Applied Physics of Russian Academy of
Sciences, Nizhnii Novgorod, Russia
28/11–24/12/2014
Transport properties of 3D topological insulators.

Fernando Delgado (PhD Student)

CFM (Ikerbasque Fellow), Donostia-San Sebastián, Spain
04/12–04/12/2014
Physics of a few magnetic atoms adsorbed on a
surface.

Prof. Peter Apell

Chalmers University of Technology, Goteborg, Sweden
08/12–13/12/2014
Optical response in nanostructures.

Prof. Albert Fert

Unité Mixte de Physique CNRS/Thales,
Université Paris Sud, France
14/12–17/12/2014
Spin-orbitronics, a new direction for spintronics:
magnetic skyrmions, spin-orbit effects in 2D electron
gas at surfaces and interfaces.

Ikerbasque Research Professors

Prof. Vyacheslav Silkin

Ultrafast dynamics of the one-particle and collective electronic excitations in metals and their surfaces. The study of electronic excitations at adsorbates on metal surfaces.

Prof. Eugene Krasovskii

Electronic structure of nanosystems, surfaces and interfaces. Attosecond time resolved photoelectron spectroscopy to study the dynamics of electronic excitations. Full dielectric function of bulk crystals, surfaces and two dimensional nanostructures. Development of new computational methods of the density functional theory.

Prof. Andrey Kazanskiy

Investigation of subfemto atto second processes in gases and solids caused by ultrashort laser pulses. Investigation of dynamics of electrons in surface and image states of noble metal and their interaction with adsorbates.

Prof. Slawomir Grabowski

Analyses of intra-and intermolecular interactions in the gas phase, ab initio and DFT calculations as well as the use of the other theoretical methods as for example Quantum theory of atoms in molecules and natural bond orbitals approach. Studies on crystal structures of organic and organometallic compounds, analyses of different Lewis acid-Lewis base interactions (mostly hydrogen bonding) influencing geometries of species constituting crystals and influencing arrangement of molecules and/or ions in crystals, the use of theoretical methods for these analyses as well as statistical methods as for example factor analysis.

Prof. Andreas Heidenreich

Computer simulations of nanoplasma formation, Coulomb explosions and nuclear fusion induced by ultraintense and ultrashort laser pulses. Computer simulations of pump-probe signals.

Prof. Mario Piris Silveira

Energy functional method development. Computational modelling of semiconductor nanocluster and molecular solid phases and polymorphism.

Prof. Thomas Frederiksen

Quantum transport theory and electronic structure methods.

Prof. Juan José Saenz Gutierrez

Ikerbasque Visiting Professor
Universidad Autónoma de Madrid, Spain
01/09/2013–31/08/2014
Nanophotonics. Modeling scanning probe microscopies.

Prof. Geza Giedke

Quantum Information and Quantum Optics: Implementations of QIP in atomic and solid-state systems.

Prof. Davide Donadio

Theory of nanostructures and transport.

Ikerbasque Research Fellows

Dr. Arantzazu Garcia Lekue

Modeling electron transport at the nanoscale. Theoretical investigation of electron processes at nano-structured surface.

Dr. María José Cabrera San Félix

Molecular level understanding of the interaction of molecules (particularly water) with surfaces and their self-assembly to form extended structures. Electronic and structural properties of clean and decorated surfaces: surface reconstructions and chemical reactivity.

Dr. Dario Bercioux

Quantum transport in defected carbon-nanotubes.