

Long visits

Dr. Galina Rusina

Russian Academy of Sciences, Tomsk, Russia
01/11/2011–28/01/2012, 16/02–15/05/2013
Surface phonons in CuPd surface alloys.

Dr. Nicolay Zaytsev

Ufa State Aviation Technical University, Ufa, Russia
07/11/2011–04/01/2012
First principle electronic structure calculations of organic molecules absorbed on metallic surfaces.

Dr. Alexey Kuzmenko

Université de Genève, Switzerland
07/11/2011–15/02/2012
Optics of Graphene.

Dr. Stepan Tsirkin

State University of Tomsk, Russia
16/11/2011–13/02/2012
Electronic excitations on metal surfaces, topological insulators.

Dr. José Luis Cabellos

CIO, Centro de Investigaciones en Optica, A.C., México
01/12/2011–30/05/2012
Charge transfer and interactions in donor-acceptor/metal systems.

Phd student Petr Vins

Institute of Chemical Technology ICT, Prague, Czech Republic
09/01–30/05/2012
Synthesis of dendrimers with incorporated fluorescent indole core.

Prof. Vladimir Menshov

Russian Research Center "Kurchatov Institute", Moscow, Russia
21/07/2010–30/11/2012, 09/01–08/04/2012, 03/04–30/06/2013
Magnetic impurities in digital alloys and topological insulators.

Dr. Andrew Walter

Lawrence Berkeley National Laboratory, USA and Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Germany
26/01–27/02/2012
Electronic Structure of Graphene: Simple but Complex.

Prof. Victor Tugushev

Russian Research Center "Kurchatov Institute", Moscow, Russia
02/02–27/04/2012, 04/09–4/11/2012, 03/04–27/06/2013, 07/10–05/12/2013
Magnetism in superlattices and spintronics.

Dr. Guido Walther

Leibniz Institute for Catalysis, University of Rostock, Germany
27/02–06/04/2012
Methane Oxidation on Gold - Elucidation of a mechanism using micrkinetic modelling.

Phd student Martin Hrtoň

Brno University of Technology, Czech Republic
01/03–07/09/2012
Optical properties of nanoscale systems.

Phd student Marcela Penoff

Universidad Nacional de Mar del Plata, Argentina
02/03–02/04/2012
Hydrophobicity studies by means of atomic force microscopy.

Prof. Roman Kuzian

Institute for Problems of Materials Science, National Academy of Sciences of Ukraine, Kiev, Ukraine
05/03–31/05/2012
Resonant inelastic X-ray scattering (RIXS).

Dr. Svetlana Borisova

Physics and Materials Science, Russian Academy of Sciences, Tomsk, Russia
10/03–09/05/2012, 16/02–15/04/2013
Defects and vibrations in topological insulators.

Prof. Vladimir Nazarov

Research Center for Applied Sciences, Academia Sinica, Taipei, Taiwan
18/03–18/04/2012
Time-dependent density-functional theory of particle-solid interactions.

Phd student Kaike Yang

Xiangtan University, China
01/04–30/06/2012
Thermoelectrics.

Prof. Istvan Nagy

Technical University of Budapest, Hungary
30/04–23/06/2012
Various aspects of correlations in extended fermionic systems; spice-fluctuation, pair-correlation, one-particle damping, impurity-screening.

Prof. Anatoly Volkov

Ruhr-Universitaet Bochum, Germany
01/05–22/06/2012
Superconductor-Ferromagnet hybrid structures.

Prof. Juan José Saenz Gutierrez

Universidad Autónoma Madrid, Madrid, Spain
08/05–31/07/2012, 01/06–31/07/2013
Nanophotonics. Modeling scanning probe microscopies.

Prof. Wolfgang Schattke

Universität Kiel, Germany
16/05–15/08/2012, 01/10–30/11/2013
Variational Quantum Montecarlo calculations of the electronic properties of solids and surfaces. Theory of photoemission in semiconductors and metals.

Prof. Nikolay Kabachnik

Institut für Experimentalphysik, Hamburg, Germany
02/06–27/08/2012, 01/07–30/09/2013
Study of Auger processes in gases and at solid surfaces within an attosecond streaking scheme.

Phd student Carlo Motta

Università di Milano-Bicocca, Italy
10/06–29/07/2012
Ab-initio study of transport in nanojunctions: application to dye-sensitized solar cells.

Phd student Chen Li

Chinese Academy of Sciences, Beijing, China
16/06–13/09/2012
Quantum effects in plasmonics.

Prof. Francisco J. Garcia Vidal

Facultad de Ciencias, Universidad Autónoma de Madrid, Spain
30/06–11/08/2012
Plasmonics.

Prof. Andrey Borisov

Université Paris Sud, France
01/07–31/08/2012
Time dependent density functional theory calculations to address the optical response of plasmonic systems.

Prof. Bo Hellsing

University of Gothenburg, Sweden
01/07–31/07/2012, 07/08–30/09/2013
Electron-phonon interactions on metal surfaces.

Dr. Sergey Eremeev

Institute of Strength Physics and Materials Sciences, Tomsk, Russia
14/07–11/10/2012, 15/03–12/06/2013, 20/09–20/12/2013
Electronic properties of topological insulators.

Prof. Ulrich Höfer

Philipps-Universität Marburg, Germany
15/07–15/09/2012
Resonance hopping on surfaces of simple metals.

Phd student Hernan Santos-Exposito

Instituto de Ciencia de Materiales de Madrid (ICMM), Madrid, Spain
16/07–30/09/2012
Graphene nanoribbons.

Dr. Ziya Aliyev

Baku State University, Azerbaijan
25/07–22/09/2012, 04/07–02/09/2013
Materials physics of topological insulators.

Prof. Vladimir Kuznetsov

Tomsk State University, Russia
28/07–29/08/2012, 28/07–28/08/2013
Density functional methods in the theory of phase diagrams of alloys and in the Kondo effects.

Prof. Stefan Maier

Imperial College London, United Kingdom
01/08–07/09/2012
Plasmonics for sensing.

Prof. Amand Lucas

FUNDP, Namur, Belgium
02/08–27/10/2012, 02/09–31/10/2013
Condensed matter physics, surface sciences, electronic and atomic structures of reduced dimensionality systems structural biology.

Dr. Yury Koroteev

Tomsk State University, Russia
20/08/2012–19/09/2012, 19/04–17/06/2013, 24/10–22/12/2013
First principles calculations of electronic structure and quasiparticle lifetimes in metals.

Prof. Pedro Luis de Andres Rodríguez

Instituto Ciencia de Materiales de Madrid, CSIC, Madrid, Spain
01/09–31/10/2012
Effect of stress in the chemical activity of graphene.

Prof. Giorgio Benedek

Università di Milano-Bicocca, Italy
11/09–11/11/2012, 09/09–30/10/2013
Surface phonons and phase transitions.

Dr. Antonio Politano

Università degli Studi della Calabria, Italy
21/09–26/10/2012
Adsorption, electronic properties and collective excitations (phonons, plasmons) in thin metal films and graphen.

Prof. Marijan Sunjic

University of Zagreb, Croatia
23/09–07/11/2012, 03/09–30/10/2013
Dynamical response and surface excitations in thin films.

Dr. Tatiana Menshchikova

State University of Tomsk, Russia
17/10–15/12/2012
Excitations on surfaces with defects.

Phd student Anastasia Riabishchenkova

State University of Tomsk, Russia
25/10–25/11/2012
Topological insulators surfaces.

Dr. Mikhail Otrokov

State University of Tomsk, Russia
26/10–22/12/2012, 14/02–16/03/2013
Electronic structure of the magnetic semiconductor digital alloys.

Prof. Raffaele Resta

Università di Trieste, Italy
01/12/2012–28/02/2013
Computational modelling of materials physics.

Phd student Raquel Gonzalez Teresa

Fundación Tecnalia, Bilbao, Spain
03/12/2012–02/03/2013
Structural models of cements.

Phd student Afaf El-Sayed

Abd-el-Mottaleb Masoud
University Al-Azar, El Cairo, Egypt
23/12/2012–23/02/2013
Molecular assemblies on metal surfaces.

Dr. Sara Garcia Revilla

ETS Ingenieros Industriales y Telecomunicaciones
UPV/EHU, Bilbao, Spain

01/01–31/05/2013

Modelling of light propagation in inhomogenous (micro-nano) dielectric materials, and study of the random lasing dynamics within organic-inorganic hybrid materials.

Dr. Fernando Ruipérez Cillán

Stockholm University, Sweden

06/01–27/06/2013

Quantum chemical studies of elementary catalytic reactions in the gas phase in transition metal containing systems.

Phd student Patrick Kraus

Istitut für Experimentalphysik Technische Universität
Graz, Austria

07/01–29/06/2013

Theory of surface dynamics and electron-phonon interaction of topological insulators, in connection with the inelastic atom scattering experiments.

Prof. Faustino Aguilera Granja

UASLP, Universidad Autónoma San Luis Potosí,
México

01/02–31/07/2013

Nanostructure materials.

Prof. Norman March

University of Antwerpen, Belgium

04/02–08/04/2013

Study of the role of exchange and correlation effects in both ground state density functional theory as well for excitation within time-dependent density-functional theory.

Prof. Alexander Protogenov

Institute of Applied Physics of Russian Academy of
Sciences, Nizhnii Novgorod, Russia

16/02–31/03/2013

Transport properties of 3D topological insulators.

Prof. Tomas Neuman

Brno University of Technology, Czech Republic

17/02–16/08/2013

Light-matter interactions in the nanoscale.

Dr. Miguel Angel Cazalilla Gutierrez

CSIC, San Sebastián, Spain

01/04–30/04/2013

Strongly correlated systems, Bose Condensates, mesoscopic and low-dimensional systems in and out of equilibrium. Electronic excitations in surfaces and anisotropic systems.

Prof. John Dobson

School of BPS & Queensland Micro and
Nanotechnology Centre, Griffith University,

Queensland, Australia

15/04–18/05/2013

Van der Waals dispersion forces and current density functional theory.

Prof. Vladlen Zhukov

Ural Branch of the Russian Academy of Sciences,
Ekaterinburg, Russia.

15/04–13/07/2013

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

Phd student Garikoitz Aguirregabiria Achutegui

Universitat Politècnica de Catalunya,

BarcelonaTech, Spain

16/04–30/09/2013

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

Phd student René Jestädt

Fritz-Haber-Institut der Max-Planck-Gesellschaft and
FU-Universität Berlin, Germany

01/05–31/07/2013

Non adiabatic electron ion dynamics in molecular nanostructures: exact versus TDDFT.

Phd student Simon Philipp Rittmeyer

Technical university of München, Germany

05/05–07/06/2013

Electronics excitations for oxygen adsorbed in silver surfaces.

Dr. Alejandro Reyes Coronado

Instituto de Física 'Ing. Luis Rivera Terrazas' de la
Benemérita Universidad Autónoma de Puebla, México

05/06–06/07/2013

Optical response of resonant metallic nanostructures in surface-enhanced microscopy and spectroscopy. Forces in metallic particles induced by fast electrons.

Phd student Arturo Santos Gómez

Instituto de Física 'Ing. Luis Rivera Terrazas' de la
Benemérita Universidad Autónoma de Puebla, México

05/06–06/07/2013

Plasmonic forces induced by fast electron beams.

Prof. Francisco Guinea Lopez

Inst.Ciencia Materiales de Madrid CSIC, Spain

21/06–21/07/2013

Condensed matter physics.

Prof. Anatoly Volkov

Ruhr-Universität Bochum, Germany

01/07–31/07/2013

Superconductor-Ferromagnet hybrid structures.

Prof. Roman O. Kuzian

Institute for Problems of Materials Science,
National Academy of Sciences of Ukraine

01/07–28/09/2013

Response function of strongly correlated systems.

Phd student Giacomo Lovat

Università di Trieste and CNR-IOM, Italy

02/07–02/09/2013

Charge transfer at interfaces for photovoltaic applications.

Prof. Imamaddin Amirasanov

Institute of Physics, ANAS, Baku, Azerbaijan

03/07–05/08/2013

Thermoelectric materials growth and crystal structures.

Dr. Zakaria Mohammed Abd El-Fattah

Faculty of Science, Al-Azhar University, El Cairo, Egypt

06/07–04/10/2013

Angle resolved photoemission experiments in metallic nanostructures.

Phd student Fulvio Berardi

Politecnico de Milano, Milano, Italy

01/08–31/12/2013

Software development and calculations for linear and nonlinear response functions of nanostructures and extended systems within TDDFT.

Dr. Vito Despoja

University of Zagreb, Croatia

01/08–30/09/2013

Within the present project the investigator use ab-initio TD-DFT approach to investigate the time dependent screening and spectrum of C1s core hole created in graphene in XPS experiment.

Dr. Marisa Faraggi

Instituto de Astronomía y Física del Espacio IAFE
(CONICET-UBA) Ciudad Autónoma de Buenos Aires,
Argentina

20/08–18/10/2013

Study of electronic dynamics on transitions metals dichalcogenides (TMDC) and modelling of 2D metal-organic networks on metallic surfaces.

Phd student Rasmus Chirstensen

DTU Nanotech, Technical University of Denmark,
Lyngby, Denmark

16/09–16/10/2013

Inelastic transport in nanoscale systems.

Dr. Bruce Milne

Centre for Computational Physics, University of
Coimbra, Coimbra, Portugal

21/10–20/12/2013

Theoretical spectroscopy of the light harvesting complex from green plants.

Prof. Alexander Protogenov

Institute of Applied Physics of Russian Academy of
Sciences, Nizhnii Novgorod, Russia

31/10–02/12/2013

Transport properties of 3D topological insulators.

Dr. Marta Pelc

Instituto de Ciencia de Materiales CSIC, Madrid, Spain
17/11–17/12/2013

Graphene and carbon nanotubes.

Short visits

Prof. Lawrence Glasser

Clarkson University, New York, USA
08/01–15/01/2012

Mathematical physics applied to condensed matter.

Prof. Istvan Nagy

Technical University of Budapest, Hungary
03/01–28/01/2012, 26/08–08/09/2012,
20/08–15/09/2013

Various aspects of correlations in extended fermionic systems; spice-fluctuation, pair-correlation, one-particle damping, impurity-screening.

Dr. Patrick S. Kirchmann

Fritz Haber Institute of the Max Planck Society,
Berlin, Germany
22/01–25/01/2012

Femtosecond time- and angle-resolved photoemission spectroscopy.

Prof. Otto Muskens

University of Southampton, United Kingdom
23/01–24/01/2012, 21/07–25/07/2013

Nanophotonics and optical nanoantenna.

Prof. Andrey Borisov

Université Paris Sud, France
26/01–28/01/2012, 15/11–30/11/2012

Time dependent density functional theory calculations to address the optical response of plasmonic systems.

Dr. Elisa Palacios Lidon

CIOn, Universidad de Murcia, Spain
27/01–27/01/2012

Study of the nanoscale surface photovoltage of organic semiconductors combining optical and Kelvin probe microscopy.

Prof. James D. Talman

University of Western Ontario, London, Ontario,
Canada

29/01–11/02/2012, 03/10–12/10/2012

Efficient methods in quantum chemistry.

Dr. Arnaud Arbouet

Centre d'Elaboration de Matériaux et d'Etudes
Structurales, CNRS/Université Paul Sabatier,
Toulouse, France

31/01–01/02/2012

Femtosecond optical spectroscopy of the ultrafast dynamics of metal nanoparticles.

Prof. Marijan Sunjic

University of Zagreb, Croatia

01/02–28/02/2012, 02/04–30/04/2013

Dynamical response and surface excitations in thin films.

Dr. Vito Despoja

University of Zagreb, Croatia
01/02–01/03/2012

Within the present project the investigator use ab-initio TD-DFT approach to investigate the time dependent screening and spectrum of C1s core hole created in graphene in XPS experiment.

Prof. Peter Sigmund

University Southern Denmark, Odense, Denmark
09/02–11/02/2012

News on particle penetration: Molecules, wakes and Fermi gas.

Prof. Eugene Kogan

Bar-Ilan University, Ramat-Gan, Israel
12/02–22/02/2012, 14/07–27/07/2013

Electronic properties of graphene.

Prof. David Guéry-Odelin

Université Paul Sabatier, Toulouse, France
16/02–18/02/2012

Guided atom optics: recent progress and applications.

Dr. Federica Lo Verso

Institute of Physics, University of Mainz, Germany
21/02–24/02/2012

Computer simulations of polymers in solution: self-assembly and phase behaviour.

Dr. Javier Gorosabel Urkia

Instituto de Astrofísica de Andalucía, Granada, Spain
23/02–01/03/2012, 01/08–19/08/2013
Astronomical instrumentation: a window of opportunities.

Prof. Vitaly N. Golovach

INAC/SPSMS, CEA Grenoble, France
23/02–25/02/2012, 05/08–8/08/2012
Holes confined in SiGe nanostructures.
Semiconductor spintronics.

Dr. Pascal Larregaray

ISM, UMR5255, Université Bordeaux1/CNRS, Talence, France
29/02–02/03/2012
Energy dissipation channels in elementary reactive processes at surfaces.

Prof. Vitali Dugaev

Martin-Luther-Universität Halle-Wittenberg, Germany
01/03–01/03/2012
Anomalous Hall effect in two-dimensional electron system in periodic magnetic field.

Dr. Shiro Kawabata

National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan and LPMMC, Université Joseph Fourier and CNRS, Grenoble, France
04/03–07/03/2012
Transport theory of ferromagnetic-insulator Josephson junctions.

Prof. Imir Ilyas Aliyev

Institute of Chemical Problems of National Academy of Science of Azerbaijan, Baku, Azerbaijan
21/03–28/03/2012
Growth of topological insulators materials.

Prof. Mahammad Babanly

Baku State University, Azerbaijan
21/03–28/03/2012, 01/12–08/12/2012, 07/12–14/12/2013
Experimental investigations of topological insulators.

Phd student Christos Tserkezis

University of Athens, Greece
22/03–24/03/2012
Optical properties of metamaterials.

Dr. Jason Robinson

University of Cambridge, United Kingdom
18/04–20/04/2012
Spin-polarised supercurrents in artificial magnetic domain walls.

Dr. Martin Svec

Institute of Physics ASCR, Praha, Czech Republic
02/04–03/04/2012, 10/04–14/04/2012
2D novel materials on metals and semiconductors.

Dr. Javier Bermejo

Facultad de Ciencia y Tecnología, UPV/EHU, Leioa, Spain
12/04–12/04/2012
The ESS-Bilbao facility: Baseline design and foreseen applications.

Prof. Ivan P. Chernov

Politechnic University of Tomsk, Russia
16/04–22/04/2012
Dynamics of hydrogen in metals under external irradiation.

Phd student Zakaria Mohammed Abd El-Fattah

Universidad del País Vasco UPV/EHU, Centro de Física de Materiales CFM/CSIC, San Sebastián, Spain
16/04–06/05/2012
Electronic/structure interplay in self-assembled nanostructured noble metal surfaces.

Phd student Avradeep Pal

University of Cambridge, United Kingdom
18/04–20/04/2012
Josephson junctions with ferromagnetic insulators.

Dr. Remi Avriller

CNRS, Université Bordeaux1, France
25/04–28/04/2012
Inelastic quantum transport properties of nanoscale objects.

Prof. Agustin Sanchez Lavega

UPV/EHU, Escuela Ingenieros de Bilbao.
18/04–18/04/2012
Las atmósferas de los planetas: Ciencia básica, aplicada y desarrollo tecnológico.

Prof. Aart W. Kleyn

HIMS, Faculty of Science, University of Amsterdam, Holland
01/05–05/05/2012
Scattering of hyperthermal atoms and molecules from metal surfaces.

Prof. Holger L. Meyerheim

Max-Planck-Institut für Mikrostrukturphysik, Halle, Germany
05/05–08/05/2012
Topological insulators.

Prof. Miguel Angel Garcia Aranda

Universidad de Malaga, Spain
07/05–08/05/2012
Crystallography of cementitious materials.

Prof. Karsten Reuter

Technische Universität München, Garching, Germany
08/05–11/05/2012
Beat the heat!

Prof. Federico Mayor Zaragoza

President of Foundation Culture of Peace, and former General Director of UNESCO
14/05–14/05/2012
Dare to know and know how to dare.

Dr. Jose Canet Ferrer

Universidad de Valencia, Spain
16/05–18/05/2012
Metamateriales (nanofotonica).

Prof. Ivan Scheblykin

Lund University, Lund, Sweden
19/05–26/05/2012
Single molecule spectroscopy approach to energy migration in individual nanostructures - from conjugated polymers to molecular aggregates.

Dr. Gisela Bocan

Centro Atómico Bariloche, Argentina
20/05–01/06/2012, 12/04–27/04/2013
Gas-surface systems, dynamics of diatomic molecules impinging on metallic surfaces, dissociative adsorption and scattering, exchange-correlation and DFT calculations, potential energy surface calculations.

Prof. Joachim Sauer

Humboldt-Universität zu Berlin, Institut fuer Chemie, Berlin, Germany
21/05–23/05/2012
Quantum chemistry: methods for investigating the structure, dynamics and reactivity of large chemical systems.

Prof. Thomas Ferrell

University of Tennessee, Knoxville, USA
23/05–25/05/2012, 18/09–15/10/2012
Condensed matter and surface physics; surface plasmons.

Prof. Jorge E. Valdés Leyton

Laboratorio de Colisiones Atómicas (LCA), Universidad Técnica Federico Santa María, Valparaíso, Chile
27/05–26/06/2012
Proton beam interaction with mono-crystalline solids and carbon nanotubes.

Prof. James Hone

Columbia University, New York, USA
03/06–05/06/2012
Growth of Graphene and boron nitride nanostructures.

Dr. Miguel Angel Cazalilla

CFM-CSIC, Donostia-San Sebastián, Spain
05/06–05/06/2012
Kondo chains on metallic surfaces.

Prof. Jon Marcaide Osoro

Universidad de Valencia, Burjassot, Spain
10/06–16/06/2012, 21/01–25/01/2013
Radio astronomy.

Prof. Roald Hoffmann

Cornell University, New York, USA
10/06–13/06/2012
Applied theoretical chemistry and... poetry and philosophy...

Dr. Daniel Rolles

Max Planck Advanced Study Group (CFEL), Hamburg, Germany
11/06–13/06/2012
Photoelectron diffraction in the gas phase.

Prof. Giancarlo Franzese

Facultat de Física, Universitat de Barcelona, Spain
14/06–15/06/2012
Issues in nanosafety and nanomedicine.

Prof. Antonio Hernando Grande

Instituto de Magnetismo Aplicado ADIF, and Universidad Complutense de Madrid, Spain
14/06–15/06/2012
Magnetism on gold-thiolate nanoparticles.

Prof. Norman March

University of Antwerpen, Belgium
18/06–18/07/2012

Study of the role of exchange and correlation effects in both ground state density functional theory as well for excitation within time-dependent density-functional theory.

Dr. Antonio Tejada Gala

Institut Jean Lamour-CNRS, Synchrotron Soleil, Paris, France

19/06–19/06/2012

Nearly ideal dispersion on graphene onto C-face SiC.

Phd student Marc Barbry

Université de Bordeaux, France

02/07–5/07/2012

Efficient methods for GW calculations with LCAO basis.

Prof. Gernot Frenking

Marburg University, Germany

06/07–06/07/2012

Unusual Chemical Bonds and Reactivities - Connecting Fundamental Research with Application in Synthetic Chemistry.

Dr. Arash Mostofi

Imperial College London, United Kingdom

07/07–14/07/2012

Theory and simulation of materials.

Dr. Jonathan Yates

University of Oxford, United Kingdom

07/07–12/07/2012

Computational solid-state NMR and EELS spectroscopy, theory and applications of Wannier functions.

Prof. Karen Louise Scrivener

EPFL-Lausanne, Switzerland

09/07–11/07/2012

Nanostructures in cements.

Dr. Christof P. Dietrich

Universität Leipzig, Germany

12/07–13/07/2012

Microcavities in ZnO

Dr. Luca Floreano

IOM-CNR, Laboratorio TASC, Trieste, Italy

12/07–15/07/2012

TiO₂(110): a flexible playground for thin film growth of aromatic molecules.

Dr. Miztli Yépez

Moving Light and Electrons Group, Universidad Autónoma de Madrid, Spain

16/07–20/07/2012

Conductance of disordered wires.

Dr. Luis S. Froufe Perez

Surface Spectroscopies & Surface Plasmon Photonics Group, Instituto de Estructura de la Materia - CSIC

16/07–20/07/2012

Light transport and emission in complex media.

Dr. Jean Christophe Tremblay

Universität Potsdam, Germany

17/07–20/07/2012

STM Induced vibrational excitations at metallic interfaces.

Prof. Gabriel Cwilich

Yeshiva University, New York, USA

18/07–27/07/2012

Fluorescence and intensity correlations in random media.

Dr. Jose Ignacio Latorre Sentis

Universitat de Barcelona, Spain

23/07–25/07/2012

Theoretical particle physics.

Prof. Zhenchao Dong

Hefei National Laboratory for Physical Sciences at the Microscale, University of Science and Technology of China, China

28/07–03/08/2012

Molecular fluorescence in scanning tunneling microscopy cavities.

Prof. Stephan W. Koch

University of Marburg, Germany

07/08–09/08/2012

Quantum design of semiconductor materials: laser, quantum optics, and THz applications.

Dr. Dana Codruta Marinica

Institut des Sciences Moléculaires d'Orsay, Université Paris Sud, France

13/08–17/08/2012

Nonlinear effects in plasmonics.

Dr. Seymour Cahangirov

Universidad de Bilkent, Turkia

08/08–01/09/2012

Simulation of properties of systems with strong correlations: oxides and transition metals.

Prof. Teun Klapwijk

Delft University of Technology, The Netherlands
28/08–02/09/2012

Superconducting nanohybrids.

Prof. Alberto Galindo Tixaire

Universidad Complutense de Madrid, Spain

02/09–30/09/2012

Quantum information and quantum algorithms. Basic problems in quantum physics. Completion of a two-volume textbook on advanced quantum mechanics, and a textbook on space-time structure.

Dr. Eduard Matito i Gras

Universidad de Girona, Spain

03/09–24/09/2012

Parallelization of Piris natural orbital functional theory.

Prof. Archie Howie

Cavendish Laboratory, University of Cambridge, United Kingdom

04/09–19/09/2012

Theory of valence electron excitations by fast electrons.

Dr. Daniele Stradi

Universidad Autónoma de Madrid, Spain

24/09–28/09/2012

Self-assembly and reactivity on the graphene/Ru [0001] surface.

Prof. Ulrich Höfer

Philipps-Universität Marburg, Germany

26/09–29/09/2012, 21/07–29/07/2013

Resonance hopping on surfaces of simple metals.

Prof. Jens Gütde

Philipps-Universität Marburg, Germany

26/09–29/09/2012

Two-photoemission of topological insulators.

Prof. Frank Wilczek

Massachusetts Institute of Technology, Center for Theoretical Physics, Cambridge, USA

30/09–07/10/2012

Theoretical Physics

Dr. Javier Recio Cortes

Instituto de Magnetismo Aplicado ADIF, and Universidad Complutense de Madrid, Spain

03/10–05/10/2012

Magnetism on gold-thiolate nanoparticles.

Dr. Mathias Ljungberg

Instituto Ciencia de Materiales de Barcelona CSIC, Spain

06/10–10/10/2012

First principles calculations of complex oxides.

Dr. Jan Höcker

Institute of Solid State Physics, University of Bremen, Germany

08/10–12/10/2012

Surface oxidation and oxidation catalysis on metal surfaces.

Dr. Jan Ingo Flege

Institute of Solid State Physics, University of Bremen, Germany

08/10–12/10/2012

Surface oxidation and oxidation catalysis on metal surfaces.

Prof. Wim Briels

University of Twente, Enschede, Holland

14/10–17/10/2012

Transient forces in soft matter systems.

Prof. Christos N. Lykos

Faculty of Physics, University of Vienna, Austria

16/10–19/10/2012

Effective potentials in soft matter systems.

Phd student Iuliia Sokolnitskaia

State University of Tomsk, Russia

17/10–15/11/2012

Topological insulators.

Phd student Viktoriya Bebeva

State University of Tomsk, Russia

17/10–15/11/2012

Topological insulators.

Prof. Juan de la Figuera Bayon

Instituto de Química Física Rocasolano (CSIC), Madrid, Spain

18/10–20/10/2012

Magnetite and the magnetite surface: a low energy electron microscopy study.

Dr. Jörg Meyer

Theoretische Chemie, Universität Technische Munich, Germany

21/10–30/10/2012

Nonadiabatic effects in gas/surface dynamics.

Prof. Walter Thiel

Max Planck Institut für Kohlenforschung, Mulheim, Germany
29/10–31/10/2012
Modeling biological processes with first principles multiscale approaches.

Dr. Paolo Sessi

University of Wurzburg, Germany
30/10–02/11/2012
Topological insulator.

Prof. Matthias Bode

University of Wurzburg, Germany
30/10–02/11/2012
Topological insulator.

Prof. Jan Peter Toennies

Max-Planck-Institut für Dynamik und Selbstorganisation, Göttingen, Germany
01/11–07/11/2012
Creating metallic nanowires by quantum turbulences in He bulk and droplets.

Prof. Mikhail Vasilevskiy

University of Minho, Braga, Portugal
04/11–09/11/2012
Surface plasmon-polaritons in multilayer nanostructures.

Prof. Mario Trioni

CNR, Università di Milano-Bicocca, Italy
04/11–09/11/2012
Electronic and magnetic properties of thin solid film on metals.

Dr. Francisco del Monte

Instituto de Ciencia de Materiales de Madrid CSIC, Spain
09/11–09/11/2012
Sustainable processes for the preparation of electrically conductive hierarchical carbon materials.

Prof. Luca Persichetti

Università di Roma "Tor Vergata" Roma, Italy
18/11–19/11/2012
Effects of elastic field anisotropy on the heteroepitaxial growth of Ge quantum dots on vicinal Si surfaces.

Prof. Pedro A. Serena Domingo

Instituto Ciencia Materiales Madrid ICMM - CSIC, Madrid, Spain
19/11–20/11/2012
Theory and simulation of nanomaterials.

Phd student Igor Rusinov

Tomsk State University, Russia
23/11–20/12/2012
Electronic structure of the magnetic semiconductor digital alloys.

Phd student Igor Silkin

Tomsk State University, Russia
24/11–20/12/2012
The electronic structure of topological insulators.

Prof. Akio Kimura

University of Hiroshima, Japan
08/12–11/12/2012
Topological insulators photoemission measurements.

Dr. Pol Forn Diaz

California Institute of Technology
07/01–09/01/2013
Atom-photon interface with nanostructures.

Prof. Giorgio Benedek

Università di Milano-Bicocca, Milano, Italy
08/01–07/02/2013
Surface phonons and phase transitions.

Dr. Alexey Soluyanov

ETH, Institute of Theoretical Physics, Zurich, Switzerland
13/01–18/01/2013
Ab-initio search for topological materials:

routine computation of topological invariants.

Prof. Esa Räsänen

Tampere University of Technology, Finland
06/01–11/02/2013
Correlated Electron dynamics in nanostructures.

Dr. Takashi Kumagai

Fritz Haber Institute of the Max Planck Society, Berlin, Germany
16/01–19/01/2013
Visualization of hydrogen-bond dynamics within water-based model systems on a metal surface.

Prof. Salvador Miret-Artés

CSIC, Madrid, Spain
18/01–20/01/2013
Theory of surface difusión.

Phd student Davide Campi

Università di Milano-Bicocca, Milano, Italy
21/01–1/2/2013
Surfaces dynamics of topological insulators.

Dr. Michael Ruggenthaler

University of Innsbruck, Austria
27/01–02/02/2013
Fundamentals of time-dependent density functional theory.

Phd student Andrea Trabattoni

Università degli Studi di Milano Bicoca, Milano, Italy
31/01–02/02/2013
Ultrafast dynamics in molecules excited by attosecond.

Prof. Francesca Ferlaino

Institut für Experimentalphysik, University of Innsbruck, Austria
31/01–02/02/2013
A Bose-Einstein Condensate of Strongly magnetic atoms.

Dr. Stefano Fabris

SISSA - Trieste, Italy
10/2–13/02/2013
Frist principle simulations of materials for energy conversion.

Dr. Jaume Navarro

Ikerbasque Research Professor UPV/EHU, Facultad de Filosofía, San Sebastián
15/02–15/02/2013
Electrons in the Thomson family: from waves to particles, and back again.

Dr. Remi Avriller

Laboratoire Onde et Matière Aquitaine (LOMA CNRS), Université Bordeaux1, France
17/02–20/02/2013
Inelastic quantum transport properties of nanoscale objects.

Prof. Arnaud Desmedt

Institut des Sciences Moléculaires, Université de Bordeaux I, Bordeaux, France
18/02–19/02/2013
Dynamics of clathrates hydrates.

Dr. Ludovic Martin-Gronde

Institut des Sciences Moléculaires ISM, Université de Bordeaux I, Talence, France
18/02–19/02/2013
Dynamics of clathrates hydrates.

Dr. Mathias Ljungberg

Instituto Ciencia de Materiales de Barcelona CSIC, Spain and Laboratoire Ondes et Matière d'Aquitaine, Université Bordeaux 1, France
18/02–23/02/2013, 25/03–28/03/2013, 12/08–17/08/2013
First principles calculations of complex oxides. Test of new decomposition of Bloch's orbital products.

Dr. Christos Tzoumanekas

National Technical University of Athens, Greece and Dutch Polymer Institute, Holland
04/03–08/03/2013
Modelling and simulation of polymer dynamics.

Prof. Helen Jansson

Chalmers University of Technology, Göteborg, Sweden
04/03–08/03/2013
The building material group at Chalmers - current research and future projects.

Phd student Julen Ibañez Azpiroz

Facultad de Ciencia y Tecnología, UPV/EHU, Leioa, Spain
27/08–31/12/2012, 14/03–14/03/2013
Magnetic excitations in high temperature superconductors through ab initio calculations.

Prof. Enrique Solano

Ikerbasque Research Professor UPV/EHU, Leioa, Spain
15/03–15/03/2013
Quantum simulations: our quantum theatre for atoms and photons.

Prof. Malcolm Stott

Queen's University, Kingston, Canada
17/03–01/04/2013
2D electron gas.

Dr. Juan Lopez Valentín

Instituto de Ciencia y Tecnología de Polimeros (CSIC), Madrid, Spain
19/03–21/03/2013
Silica filled rubber compounds.

Prof. Rolf Heid

Karlsruhe Institute of Technology (KIT), Germany
01/04–05/04/2013
Electron phonon interaction in bulk metals and at surfaces.

Prof. Francisco Guinea Lopez

Inst.Ciencia Materiales de Madrid.CSIC, Madrid, Spain
10/04–13/04/2013
Condensed matter physics.

Dr. Bruno Rousseau

Université de Montréal, Canada
12/04–12/04/2013
Efficient computation of GW energy level corrections for molecules described in a plane wave basis.

Prof. Ludo B.F. Juurlink

Leiden Institute of Chemistry, Leiden University, The Netherlands
16/04–18/04/2013
Surface corrugation effects in dissociation dynamics

Dr. Andrea Donarini

Institute of Theoretical Physics, University of Regensburg, Germany
21/04–23/04/2013
Transport characteristics of complex interacting nano-junctions.

Prof. John Pendry

Imperial College London, United Kingdom
21/04–23/04/2013, 24/09–04/10/2013
Metamaterials.

Dr. Sebastian Stepanow

Max-Planck-Institut für Festkörperforschung, Stuttgart, Germany
24/04–26/04/2013
Physical chemistry of surface-confined metal-organic complexes.

Dr. Ion Errea Lope

Institut de Minéralogie et de Physique de Milieux Condensés, Université Pierre et Marie Curie, Paris, France
26/04–03/05/2013
Anharmonic free energies and phonon dispersions from the self-consistent harmonic approximation.

Prof. Michel A. Van Hove

Institute of Computational and Theoretical Studies (ICTS) Hong Kong Baptist University, Hong Kong
28/04–30/04/2013
Adsorption structures of large molecules on single-crystal metal surfaces.

Prof. Carmen Ocal

ICMAB-CSIC, Barcelona, Spain
06/05–06/05/2013
Atomic force microscopy and scanning tunneling microscopy.

Prof. Jorge Iribas Cerdá

ICMM-CSIC, Madrid, Spain
06/05–06/05/2013
Quantum theory of electronic transport.

Prof. Luisa E. Bausa López

Universidad Autónoma de Madrid UAM, Madrid, Spain
06/05–06/05/2013
Laser physics.

Prof. Marian Paluch

Institute of Physics, University of Silesia, Poland
20/05–22/05/2013
Tutorial on Broadband dielectric spectroscopy as a powerful tool for investigating molecular dynamics and proton reaction kinetics of condensed matter systems at ambient and elevated pressure.

Dr. Sampsa Riikonen

Helsinki University of Technology, Finland
27/05–13/06/2013
Theoretical studies of complex surface reconstructions.

Prof. Surendra P. Shah

Northwestern University, Evanston, USA
27/05–01/06/2013
Nanoadditions in cements.

Prof. Luca Tagliacozzo

Instituto de Ciencias Fotónicas, Barcelona
30/05–31/05/2013
Synergies between new tools for studying strongly correlated many body quantum systems.

Prof. Chris Exley

Birchall Centre, Keele University, United Kingdom
03/06–06/06/2013
Aluminum Interactions with Biological systems

Prof. Dominique Costa

Laboratoire de Physico-Chimie des Surfaces, ENSCP Chimie ParisTech, Paris, France
03/06–05/06/2013
Computational Simulations of superoxide absorption in Boehmite.

Dr. Elena Formoso Estensoro

Università della Svizzera Italiana, Lugano, Switzerland
06/06–16/06/2013
Study of aluminum reactive oxygen species.

Dr. Dietrich Foerster

CPMOH/LOMA Université de Bordeaux, France
11/06–14/06/2013, 01/07–04/07/2013, 22/07–27/07/2013
Test of new decomposition of Bloch's orbital products.

Dr. Javier Villegas Hernandez

Unité Mixte de Physique CNRS/Thales, Palaiseau, France
13/06–15/06/2013
Superconductor/ferroic hybrids.

Prof. Talat S. Rahman

University of Central Florida, Orlando, USA
16/06–24/06/2013
Characteristics of functional nanomaterials: insights from first principles.

Prof. Annemarie Pucci

University of Heidelberg, Kirchhoff Institute for Physics, Germany
19/06–21/06/2013
Field-enhanced infrared spectroscopy.

Dr. Daniel Niesner

University of Erlangen
19/06–23/06/2013
Two-photon photoemission studies of graphene and topological insulators.

Dr. Richard Korytár

Karlsruhe Institute of Technology (KIT), Institute of Nanotechnology, Eggenstein-Leopoldshafen, Germany
19/06–21/06/2013
Correlated transport in nanostructures.

Prof. Rémi Carminati

Institut Langevin, ESPCI ParisTech, Paris, France
23/06–28/06/2013
Light scattering in random media.

Dr. Juraj Feilhaber

Universidad Autonoma de Madrid
30/06–05/07/2013
Waves in disordered media.

Dr. Laura Rósaes Zárate

Universidad Autonoma de Madrid, Spain
30/06–12/07/2013
Plamronics and nanophotonics.

Dr. Miztli Yopez

Universidad Autonoma de Madrid, Spain
30/06–12/07/2013
Waves in disordered media.

Phd student Hector Ochoa de Eguileor

Instituto Ciencia de Materiales de Madrid, CSIC, Madrid, Spain
01/07–12/07/2013
Graphene theory and models.

Prof. Andrey Borisov

Université Paris Sud, France
04/07–31/07/2013
Time dependent density functional theory calculations to address the optical response of plasmonic systems.

Prof. Salvador Ferrer Fabregas

Synchrotron ALBA, Cerdanyola del Valles, Spain
10/07–14/07/2013
The Alba light source. Present status and perspectives.

Prof. Guido Fratesi

Universidad degli Studi di Milano-Bicocca, Milano, Italy
15/07–18/07/2013
Charge transfer times of adsorbates: dye molecules on TiO₂ from first-principles DFT calculations.

Phd student Daniel Traviss

University of Southampton, United Kingdom
16/07–26/07/2013
Nanophotonics and optical nanoantennas.

Dr. Martin Reiris Ithurralde

Max Planck Institute for Gravitational Physics, Golm, Germany
17/07–20/07/2013
A theoretical perspective of black-holes: past and present.

Phd student Tomas Alonso Lanza

Universidad de Cantabria, Santander, Spain
18/07–18/07/2013

Cobalt clusters in nanotubes.

Phd student Adam Stepniewski

Jerry Haber Institute of Catalysis and Surface
Chemistry of Poland Academy of Sciences,

Krakow, Poland

22/07–27/07/2013

Electronic properties of heterogenous catalysis.

Prof. Ewa Broclawik

Jagiellonian University, Faculty of Chemistry, Krakow,
Poland

22/07–27/07/2013

Electronic properties of heterogenous catalysis.

Dr. Fredrik Hage

STFC Daresbury Laboratories, Warrington,
United Kingdom

23/07–26/07/2013

Topologically induced confinement and possible
negative refraction index in polycrystalline graphene
nano-cones by momentum transfer dependent
STEM-VEELS.

Prof. Stefan Maier

Imperial College London, United Kingdom

01/08–06/08/2013

Plasmonics for sensing

Dr. Anna Isaeva

Technical University, Dresden, Germany

02/08–11/08/2013

Growth of complex semiconductor structures

Phd student Daniele Stradi

Universidad Autónoma de Madrid (UAM) and
IMDEA-Nanoscience, Spain

04/08–06/08/2013

Transport properties of graphene@Ru(0001).

Prof. Nikolaos Stefanou

National and Kapodistrian University of Athens,
Greece

06/08–08/08/2013

Light scattering in nanostructures.

Dr. Antonio Politano

Università degli Studi della Calabria, Italy

18/08–30/08/2013

Adsorption, electronic properties and collective
excitations (phonons, plasmons) in thin metal films
and graphen.

Prof. Wlodzimierz Jaskólski

Institute of Physics Nicholas Copernicus University,
Poland

25/08–24/09/2013

Study of quantum dot arrays and nanotube
superlattices.

Prof. Herbert Pfnür

Leibniz Universität Hannover, Germany

02/09–04/09/2013

Plasmons in low-dimensional systems.

Prof. Guy Le Lay

CINaM, Aix-Marseille University, Marseille, France
and CNR-ISM, Rome, Italy

9/09–11/09/2013

Structural and electronic properties of silicene and
germane: synthesis, STM and photoelectron spec-
troscopy.

Prof. Garnett Bryant

NIST, Gaithersburg, Maryland, USA

14/09–21/09/2013

Nanophotonics.

Prof. Markus Hennrich

Institute for Experimental Physics,
University of Innsbruck, Austria

15/09–18/09/2013

Quantum optics and spectroscopy.

Prof. Shangjr Gwo

National Tsing-Hua University, Taiwan

15/09–17/09/2013

Plasmonic nanolasers and nanostructures.

Dr. Leonor Chico Gómez

Instituto de Ciencia de Materiales de Madrid (ICMM),
Spain

16/09–21/09/2013

Electronic structure calculations in nanotubes.

Prof. Archie Howie

Cavendish Laboratory, Cambridge, United Kingdom

19/09–5-10/2013

Theory of valence electron excitations by fast
electrons.

Dr. Igor Popov

School of Physics, Trinity College Dublin, Ireland

25/09–28/09/2013

Theory of electron transport at the nanoscale.

Phd student Ivor Loncaric

Centro de Fisica de Materiales CSIC-UPV/EHU
San Sebastian, Spain

25/09–25/10/2013

Dissociation dynamics and hot atom diffusion in the
interaction of O₂

molecules with the Ag(110)surface.

Prof. Aaron Ciechanover

Institute for Research in Medical Sciences at the
Technion (Israel Institute of Technology), Haifa, Israel

27/09–04-10/2013

Scientific communication.

Prof. Dudley Herschbach

Harvard University, Massachusetts, USA

27/09–06/10/2013

Scientific communication.

Prof. Davide Donadio

MPI for Polymer Research, Mainz, Germany

28/09–11/10/2013

Theory of nanostructures and transport.

Prof. Juan Ignacio Cirac

Max-Planck-Institut für Quantenoptik,
Garching, Germany

28/09–4/10/2013

Scientific communication.

Dr. Mads Engelund

DTU, Copenhagen, Denmark

29/09–5/10/2013

Quantum electron transport in nanosystems.

Prof. Claude Cohen-Tannoudji

Laboratoire Kastler Brossel, Paris, France

30/09–04/10/2013

Scientific communication.

Prof. Jean Marie Lehn

1987 Nobel Prize in Chemistry

30/09–4/10/2013

Scientific communication.

Dr. Maria Silvia Gravielle

Instituto de Astronomía y Física del Espacio,

Universidad de Buenos Aires, Argentina

30/09–10/10/2013

Electron emission from metal surfaces.

Energy loss in fast atom diffraction.

Prof. Rafael Yuste

Columbia University, Biological Sciences, New York,
USA

30/09–3/10/2013

Scientific communication.

Prof. John Inglesfield

University of Wales Cardiff, United Kingdom

03/10–31/10/2013

Embedding in photonics and plasmon bands in
metallic nanostructures.

Prof. Daniel Farias Tejerina

Universidad Autónoma de Madrid, Spain

15/10–17/10/2013

Phonon dynamics of graphene.

Prof. Roland Pellenq

MIT, Massachusetts, USA

20/10–22/10/2013

Modelling of cements.

Dr. Martin Gradhand

University of Bristol, United Kingdom

27/10–2/11/2013

Spin dependent electronic transport.

Dr. Tatiana Menshchikova

State University of Tomsk, Russia

31/10–28/11/2013

Excitations on surfaces with defects.

Prof. Gilberto Teobaldi

University of Liverpool, United Kingdom

06/11–10/11/2013

Linear-scaling approaches to charge- and energy-
transfer in (extended) photo-electro-chemical
interfaces.

Dr. Mads Engelund

DTU, Copenhagen, Denmark

07/11–15/11/2013

Modeling of electron transport at the nanoscale.

Prof. Denis Vyalikh

Dresden University of Technology, Dresden, Germany

13/11–15/11/2013

Photoemission measurements of magnetic surface
status.

Prof. Kart Kummer

European Sincotron Radiation Facility, Grenoble,
France
13/11–15/11/2013
Photoemission measurements of magnetic surface
status.

Prof. Nicolas Lorente

Centro de Investigación en Nanociencia y
Nanotecnología (CIN2-CSIC), Bellaterra, Spain
14/11–15/11/2013
Inelastic electron tunnelling spectroscopy.

Dr. Adrian Stan

Détaché à Laboratoire des Solides Irradiés,
École Polytechnique, Palaiseau, France
17/11–20/11/2013
Many body perturbation theory and electron-electron
interactions in transport theory.

Dr. Manuela Garnica Alonso

IMDEA Nanociencia, Madrid, Spain
21/11–22/11/2013
Electron Acceptor Molecules deposited on epitaxial
graphene studied by means of Low temperature
scanning tunneling microscopy/spectroscopy.

Prof. Peter Apell

Chalmers University of Technology,
Goteborg, Sweden
25/11–30/11/2013
Optical response in nanostructures.

Dr. Jan Honolka

Institute of Physics, Academy of Sciences of the
Czech Republic (ASCR), Prague, Czech Republic
03/12–06/12/2013
X-ray spectroscopy of 3d magnetic impurities on
graphene and graphite: from strong to weak
interaction.

Dr. Ioannis Zegkinoglou

University of Wisconsin and
Lawrence Berkeley National Laboratory, USA
11/12–14/12/2013
Surface chemistry in organic solar cells.

Ikerbasque Research Fellows**Prof. Richard O. Prum**

Yale University, Peabody Museum of Natural History, New Haven, USA
01/09/2011–31/05/2012
Optical properties of natural structures: an evolutionist approach.

Prof. Andreas Heidenreich

University of Tel Aviv, Israel
01/01/2012
Computer simulations of nanoplasma formation, Coulom explosions and nuclear fusion induced by
ultraintense and ultrashort laser pulses. Computer simulations of pump-probe signals.

Prof. Andrey Kazanskiy

University of San Petersburg, Russia
01/01/2012
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. Eugene Krasovskii

Universität Kiel, Germany
01/01/2012
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, sur-
faces and two dimensional nanostructures. Development of new computational methods of the density
functional theory.

Prof. Mario Piris Silveira

University of Erlangen, Nuremberg, Germany
01/01/2012
Energy functional method development. Computational modelling of semiconductor nanocluster and
molecular solid phases and polymorphism.

Prof. Slawomir Grabowski

University of Lodz, Poland
01/01/2012
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. Vyacheslav Silkin

Russian Academy of Science, Tomsk, Russia

01/01/2012

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. Jeremy Baumberg

Cavendish Laboratory, Cambridge, United Kingdom

03/04–30/09/2012

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.

Prof. Thomas Frederiksen

Technical University of Denmark, Denmark

15/08/2012

Quantum transport theory and electronic structure methods.

Prof. Arantazu Garcia Lekue

Lawrence Berkeley National Laboratory, USA

01/11/2012–30/10/2017

Modeling electron transport at the nanoscale. Theoretical investigation of electron processes at nanostructured surface.

Prof. María José Cabrera San Félix

University of Liverpool, United Kingdom and Fundación Donostia International Physics Center,

Donostia-San Sebastián, Spain

01/11/2012–31/10/2017

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.

Prof. Juan José Saenz Gutierrez

Universidad Autónoma de Madrid, Spain

01/09/2013–31/08/2014

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.

Development and applications of time-dependent density matrix functional theory

Ali Akbari (UPV/EHU)

September 2012

Supervisor: Angel Rubio Secades

Tetrapyrrole molecules on metallic and oxide surface: reactivity and structure

Rubén Gonzalez Moreno (Universidad Autónoma de Madrid)

October 2012

Directora: Celia Rogero

Surface states manipulation via surface/interface defects and adsorbates

Zakaria Mohammed Abd El-Fattah (UPV/EHU)

October 2012

Supervisor: Enrique Ortega Conejero

Collective electronic excitations in layered metallic systems

Juan Pablo Echeverry (UPV/EHU)

November 2012

Supervisors: Eugene Tchulkov and Viacheslav Silkin

Reactivity and dynamics of N₂ and O₂ on different metal surfaces

Itziar Goikoetxea Martínez

February 2013

Supervisors: Maite Alducin and Iñaki Juaristi

Rare earth/Noble metal surface alloys

Maider Ormaza Saezmiera

June 2013

Supervisor: Enrique Ortega Conejero

Slow dynamics in nanostructured phases of diblock, gradient and random copolymers

Mohammed Zakaria Slimani

July 2013

Supervisor: Angel José Moreno Segurado