

Workshops

29/10/2015

Image processing tools for the study of brain connections.

Dr. Ignacio Arganda Carreras (Ikerbasque Fellow)
University of the Basque Country, UPV/EHU, Spain

06/11/2015

Hybrid upconversion nanomaterials for photochemotherapy.

Luca Salassa
CIC BiomaGUNE, Donostia/San Sebastián, Spain

11/11/2015

Stellar occultations: Chariklo and its ring system.

Rodrigo Leiva
Instituto de Astrofísica, Facultad de Física, Pontificia Universidad Católica de Chile.
Observatoire de Paris, LESIA, France

19/11/2015

Topologically confined states at corrugations of gated bilayer graphene.

Dr. Marta Pelc
CFM, Centro de Física de Materiales, Donostia/San Sebastián, Spain

15/12/2015

100 años de Relatividad General.

Prof. Alberto Galindo Teixaire
Ex-Presidente de la Real Academia de Ciencias Exactas, Físicas y Naturales

Theory for Planar Molecular and Atomic Scale Devices

January 26-28, 2015

Donostia International Physics Center, Donostia/San Sebastián
http://dipc.ehu.es/ws_presentacion.php?id=116

Organizing Committee

Daniel Sánchez-Portal (CFM CSIC-UPV/EHU, DIPC)
Mads Engelund (CSIC, Madrid)
Thomas Frederiksen (DIPC, Ikerbasque)
Aran García-Lekue (DIPC, Ikerbasque)

The aim of the workshop was to bring together some of the groups working actively on the field (singularly those involved in the European Integrated Fp7 FET project PAMS, contract number 610446). The explored atomic and molecular devices included dangling bond circuitries, functionalized by coupling with organic molecules, and controlled by remote alteration of molecular states by local band bending. Multibranch polyaromatic logical gates addressed by nanowires were also explored.

The development of new methodological tools, allowing for a multiscale description (using from first-principles to empirical force-fields) of the structural, electronic and transport properties of such atomic and molecular devices was also discussed. The ultimate aim was to optimize the design and synthesis of atomic and molecular gates by developing these new theoretical tools.

Invited Speakers

Ville Loukonen, Hugo Pinto, Juha Ritala, John Tracey and Adam Foster (Aalto University)

Mads Engelund from (CSIC)

Thomas Frederiksen (Ikerbasque, DIPC)

Benoit Eydoux, Ghassen Dridi, Omid Faizy (CEMES-CNRS, Toulouse)

Andrii Kleshchonok, Thomas Lehmann (Dresden University of Technology)

Daniel Sánchez-Portal (CFM CSIC-UPV/EHU, DIPC)

Imaginenano 2015

March 10-13, 2015

Bilbao Exhibition Center - BEC

www.imaginenano.com

Organizers

Phantoms Foundation, CIC nanoGUNE, DIPC, CFM, UPV/EHU and BEC

The 3rd edition of the largest European Event in Nanoscience & Nanotechnology, ImagineNano, gathered the global nanotechnology community, including researchers, industry policymakers and investors. Following the overwhelming success of ImagineNano 2013, several conferences were held in parallel in a new infrastructure, as well as a vast exhibition, one-to-one meetings and an industrial forum where everyone could meet and greet Nanotechnology side by side.

Five different conferences on Nanoscience & Nanotechnology were organized covering hot topics in the fields of Graphene, Bio/Medicine, Optics, Photonics, Chemistry, and Toxicology.

Key Lectures

Ignacio Cirac (Max Planck Institute of Quantum Optics, Germany)

Jean Marie Lehn (University of Strasbourg, France)

Discussions on Nano and Mesoscopic Optics (DINAMO) 2015

April 8-12, 2015

El Chalten (Santa Cruz, Argentina)

<http://dinamo2015.df.uba.ar/>

Organizing Committee

Andrea Bragas (CONICET, UBA, Argentina)

Marcelo Lester (UNICEN, Tandil, Argentina)

Stefan A. Maier (Imperial College London, UK)

Juan José Sáenz (UAM, Madrid and DIPC, San Sebastián, Spain)

Fernando Stefani (CONICET, UBA, Argentina)

Scientific Committee

Javier Aizpurua (CFM CSIC-UPV/EHU, DIPC, San Sebastián, Spain)

Aristide Dogariu (CREOL, Florida, USA)

Lukas Novotny (ETH-Zürich, Switzerland)

Gabriel Cwilich (Yeshiva University, NY, USA)

Markus Schmidt (Friedrich Schiller University Jena, Germany)

The subjects covered by DINAMO embraced practically all branches of nano- and mesoscopic optics, including plasmonics, optical manipulation, cavity optics, optical fields in random media, single molecule spectroscopy, non-linear nano-optics, nano-holography, optical nano-antennas, opto-mechanics and bi-photonics, both from experimental and theoretical viewpoints.

DINAMO was conceived to provide an interdisciplinary forum where leading investigators from around the world could present and discuss their latest work and future challenges in an informal and interactive format.

Invited Speakers

Guillermo Acuña (Technische Universität Braunschweig, Germany)

Jeremy Baumberg (Cambridge University, UK)

Remi Carminati (Institut Langevin, ESPCI, France)

Scott Carney (University of Illinois at Urbana-Champaign, USA)

Eduardo Coronado (University of Córdoba, Argentina)

Alejandro Fainstein (Instituto Balseiro, Argentina)

Jochen Feldman (LMU Munich, Germany)

Mathias Fink (Institut Langevin, France)

Monika Fleischer (Universität Tübingen, Germany)

Ernst-Ludwig Florin (University of Texas at Austin, USA)

P. David Garcia (University of Copenhagen, Denmark)

Francisco J. Garcia Vidal (IFIMAC, Universidad Autónoma de Madrid, Spain)

Rainer Hillenbrand (Nanogune, Spain)

Ulrich Hohenester (University of Graz, Austria)
Christiane Höppener (University of Münster, Germany)
Peter Johansson (Chalmers, Sweden)
Mikael Käll (Chalmers, Sweden)
Stephane Kena-Cohen (Imperial College/Polytechnique Montreal, Canada)
Pieter Kik, CREOL (University Central Florida, USA)
Daniel Lanzillotti Kimura (Laboratoire de Photonique et de Nanostructures, France)
Cefe López (ICMM-CSIC, Spain)
John Lupton (Universität Regensburg, Germany)
Onofrio M. Marago, (CNR-IPCF, Italy)
Georg Maret (Konstanz University, Germany)
Oscar Martínez (Universidad de Buenos Aires, Argentina)
Gabriel Molina-Terriza (Macquarie University, Australia)
Otto Muskens (University of Southampton, UK)
Manuel Nieto-Vesperinas (ICMM-CSIC, Spain)
Jose Ignacio Pascual (CIC nanoGUNE, Spain)
Francesco Pedaci (Centre de Biochimie Structurale, Montpellier, France)
Helmut Ritsch (University of Innsbruck, Austria)
Monika Ritsch-Marte (Innsbruck Medical Univ., Austria)
Halina Rubinsztein (University of Queensland, Australia)
Frank Scheffold (University of Fribourg, Switzerland)
Norbert F. Scherer (University of Chicago, USA)
Sergey Skipetrov (CNRS, Grenoble, France)
Galo Soler-Illia (University of Buenos Aires, Argentina)
Philip Tinnefeld (Technische Universität Braunschweig, Germany)
Niek van Hulst (ICFO, Barcelona, Spain)
Silvia Vignolini (University of Cambridge, UK)
Alex Weber-Bargioni (Material Science Division LBNL, Berkeley, USA)
Ulrike Woggon (TUB Berlin, Germany)
Pavel Zemanek (Institute of Scientific Instruments, Academy of Sciences, Czech Republic)

11th Capri Spring School on Transport in Nanostructures 2015

April 12-19, 2015

Villa Orlandi, Isola di Capri, Italy

www.capri-school.eu

Organizing Committee

Dario Bercioux (Ikerbasque, DIPC)

Alessandro De Martino (City University London)

Reinhold Egger (Heinrich-Heine-Universität - Düsseldorf)

Hermann Grabert (Albert-Ludwig-Universität - Freiburg)

Christian Schönenberger (Universität Basel)

Arturo Tagliacozzo (Università "Federico II" Napoli)

This one week spring school on topological superconductivity provided several three to four hour lectures by leading experts supplemented by a few shorter seminars. The speakers gave graduate level presentations introducing state-of-the-art methods and techniques featuring the key issues of the field of topological superconductivity. While the school was primarily aimed at instructing PhD students and young postdoctoral researchers, more senior scientists who wanted to acquaint themselves with the subject of the school were also welcome.

Keynote Speakers

Yoichi Ando (Osaka)

Liang Fu (MIT)

Moty Heiblum (Weizmann)

Tony Leggett (Urbana)

Andreas Schnyder (MPI Stuttgart)

Björn Trauzettel (Würzburg)

The 15th International Conference on Vibrations at Surfaces (VAS15)

June 22-26, 2015

Miramar Palace, Donostia/San Sebastián

<http://vas15.dipc.org/>

Organizing Committee

Andres Arnau (CFM CSIC-UPV/EHU, DIPC)

Giorgio Benedek (Università degli Studi di Milano)

Eugene Chulkov (UPV/EHU, DIPC)

Asier Eiguren (UPV/EHU)

Aran Garcia Lekue (DIPC, Ikerbasque)

Aitor Mugarza (ICN2)

Jose Ignacio Pascual (CIC nanoGUNE, Ikerbasque)

Thomas Frederiksen (DIPC, Ikerbasque) (Chair)

International Advisory Committee

Philip B. Allen, Stony Brook (USA)

Heriberto Fabio Busnengo, CONICET Rosario (Argentina)

Renée D. Diehl, Penn State (USA)

Ricardo Diez Muiño, CFM –CSIC-UPV/EHU– and DIPC (Spain)

Claudia Draxl, Humboldt University Berlin (Germany)

Karl-Heinz Ernst, EMPA (Switzerland)

Wolfgang Ernst, TU Graz (Austria)

Daniel Fariás, Universidad Autónoma de Madrid (Spain)

Hans-Joachim Freund, Fritz-Haber-Institut der MPG, Berlin (Germany)

Wilson Ho, University of California-Irvine (USA)

Chakram S. Jayanthi, University of Louisville (USA)

Maki Kawai, University of Tokyo (Japan)

Zhiyuan Li, Chinese Academy of Sciences, Beijing (China)

Nicolas Lorente, CIN2 Barcelona (Spain)

Joseph R. Manson, Clemson University (USA)

Richard E. Palmer, University of Birmingham (UK)

Talat S. Rahman, University of Central Florida (USA)

Mario Rocca, Università Genova (Italy)

Erio Tosatti, SISSA Trieste (Italy)

Hiromu Ueba, University of Toyama (Japan)

Vibrations at Surfaces (VAS) was an international conference and main venue for scientific exchange in the field of surface vibrational spectroscopy and surface dynamics. VAS15 covered topics such as:

Dynamics at surfaces

Electron and thermal transport

Nanotribology and friction

STM-IETS

Surface chemistry and catalysis

Surface scattering

Time-resolved vibrational spectroscopy

Tip-enhanced Raman spectroscopy

Topological insulators and superconductors

Vibrations of 2D structures and layered materials

Invited Speakers

Ellen Backus (MPI Mainz, Germany)

Rainer Beck (EPFL, Switzerland)

Marie-Laure Bocquet (ENS Montrouge, France)

Matteo Calandra (Université Pierre et Marie Curie, Paris, France)

Kramer Campen (FHI Berlin, Germany)

Davide Donadio (DIPC, Spain)

Zhenchao Dong (USTC Hefei, China)

Michael El-Batanouny (Boston University, USA)

John Ellis (University of Cambridge, United Kingdom)

M. Verónica Ganduglia-Pirovano (ICP CSIC, Madrid, Spain)

Karsten Hannewald, (Humboldt-University, Berlin, Germany)

Holly Hedgeland (UCL, United Kingdom)

Peter Jakob (Marburg University, Germany)

Ying Jiang (Peking University, China)

Yousoo Kim (RIKEN Tokyo, Japan)

Nicolas Lorente (CFM-CSIC, DIPC, Spain)

John Polanyi (University of Toronto, Canada)

Mark A. Reed (Yale University, USA)

Jascha Repp (Regensburg University, Germany)

Irina Y. Sklyadneva, (DIPC and Tomsk State University)

Sergio O. Valenzuela (Institut Catala de Nanociencia i Nanotecnologia, Spain)

Richard P. Van Duyne (Northwestern University, USA)

Justin Wells (NTNU, Norway)

Alec M. Wodtke (MPI Göttingen, Germany)



New Trends in Topological Insulators 2015 (NTTI2015)

July 6-10, 2015

Miramar Palace, Donostia/San Sebastian

http://dipc.ehu.es/ws_presentacion.php?id=110

Scientific Committee

Evgueni V. Chulkov (UPV/EHU, DIPC)

M. Zahid Hasan (Princeton University, USA)

Laurens Molenkamp (University of Würzburg, Germany)

Sergey Frolov (University of Pittsburg)

Organizing Committee

Evgueni V. Chulkov (UPV/EHU, DIPC)

Maia G. Vergniory (DIPC)

Mikhail M. Otrokov (DIPC)

New Trends in Topological Insulators (NTTI) is an international conference and main venue for scientific exchange in the field of Topological Insulators in Europe. NTTI2015 is the third edition of a series of meetings that started a few years ago in Saint Feliu de Guixols (2013) and Berlin (2014).

As in the previous meetings the goal of NTTI2015 was to bring together experienced and young researchers as well as students working in topological insulators from different aspects, such as magnetic interaction, collective excitations, superconductivity, quantum anomalous hall effect and electron and spin structure.

Invited speakers

B. Andrei Bernevig (Princeton University, USA)

Gustav Bihlmayer (Forschungszentrum Jülich, Germany)

Sergey Eremeev (Russian Academy of Sciences, Moscow, Russia)

Arthur Ernst (Max Planck Institute of Microstructure Physics, Germany)

Motohiko Ezawa (University of Tokyo, Japan)

Sergey Frolov (University of Pittsburgh, USA)

Zahid Hasan (Princeton University, USA)

Rolph Heid (Karlsruher Institut für Technologie, Germany)

Akio Kimura (Hiroshima University, Japan)

Holger Meyerheim (Max Planck Institute of Microstructure Physics, Germany)

Laurens Molenkamp (University of Würzburg, Germany)

Jagadeesh Moodera (MIT, USA)

Herbert Pfnur (Leibniz Universität Hannover, Germany)

Antonio Politano (Università degli Studi della Calabria, Italy)

Oliver Rader (Helmholtz Zentrum, Berlin, Germany)

Andreas Schnyder (Max-Planck-Institut für Festkörperforschung, Germany)

Jonathan Sobota (Stanford University, USA)

Ilya Sochnikov (Stanford University, USA)

Marin Soljacic (MIT, USA)

Yukio Tanaka (Nagoya University, Japan)

Alexey Taskin (Nagoya University, Japan)

Christoph Tegenkamp (Leibniz Universität Hannover, Germany)

Atsushi Tsukazaki (Tohoku University, Japan)

Tonica Valla (Brookhaven National Laboratory, USA)

Bohm-Jung Yang (RIKEN Center for Emergent Matter Science, Japan)

Ali Yazdani (Princeton University, USA)

Oleg Yazyev (EPFL, Switzerland)



Interaction effects in graphene and related materials

July 13-17, 2015

Miramar Palace, Donostia/San Sebastian

<http://dipc.ehu.es/iegr/>

Organizing Committee

Andres Arnau (CFM CSIC-UPV/EHU, Donostia/San Sebastian, Spain)

Paco Guinea (University of Manchester, UK, and Imdea Nanoscience, Madrid, Spain)

Rainer Hillenbrand (CIC nanoGUNE, Ikerbasque, San Sebastian, Spain)

Rodolfo Miranda (Imdea Nanoscience, Madrid, Spain)

Vittorio Pellegrini (IIT, Genoa, Italy)

Marco Polini (Scuola Normale Superiore, Pisa, Italy)

The workshop focused on "interaction effects" in graphene and related materials including hexagonal boron nitride, transition metal dichalcogenides, and few-layer black phosphorus. This workshop covered recent advances in our understanding of fundamental interactions in 2D materials and their van der Waals stacks, with top-notch speakers spanning a wide variety of cryogenic and non-cryogenic phenomena that emerge in magneto-transport, linear and non-linear optics, plasmonics, and spintronics spectroscopies.

Invited Speakers

E. Andrei (New Jersey, USA)

R. Asgari (Tehran, Iran)

R. Ashoori (Massachusetts, USA)

D. Basov (California, USA)

G. Bilhmayer (Jülich, Germany)

M. Bockrath (California, USA)

K. Bolotin (Tennessee, USA)

I. Brihuega (Madrid, Spain)

A. Castellanos (Madrid, Spain)

A.H. Castro Neto (Singapore)

M.A. Cazalilla (Taiwan)

S. Das Sarma (Maryland, USA)

K. Ensslin (Zurich, Switzerland)

V.I. Fal'ko (Lancaster, UK)

J. Fernandez-Rossier (Braga, Portugal)

A.C. Ferrari (Cambridge, UK)

A. Fert (Saclay, France)

M. Fogler (California, USA)

A. Geim (Manchester, UK)

J. Gomez (Madrid, Spain)

Chema Gómez (Madrid, Spain)

C. Gomez-Navarro (Madrid, Spain)

J. Gonzalez (Madrid, Spain)

I. Grigorieva (Manchester, UK)

I. Herbut (Columbia, Canada)

P. Jarillo-Herrero (Massachusetts, USA)

M.I. Katsnelson (Nijmegen, The Netherlands)

F.H.L. Koppens (Barcelona, Spain)

A. Lanzara (California, USA)

J. Lau (California, USA)

L. Levitov (Massachusetts, USA)

S.G. Louie (California, USA)

T. Low (Minnesota, USA)

A.H. MacDonald (Texas, USA)

H. Manoharan (California, USA)

L. Martin-Moreno (Zaragoza, Spain)

N. Marzari (Lausanne, Switzerland)

F. Mauri (Paris, France)

Ygal Meir (Negev, Israel)

E. Mele (Pennsylvania, USA)

G. Montanbux (Paris, France)

A. Morpurgo (Geneve, Switzerland)

B. Narozhny (Karlsruhe, Germany)

H. Ochoa (California, USA)

B. Özyilmaz (Singapore)

Nuno Peres (Braga, Portugal)

L. Ponomarenko (Lancaster, UK)

M. Potemski (Grenoble, France)

S. Roche (Barcelona, Spain)

E. Rossi (Virginia, USA)

E. Rotenberg (California, USA)

P. San Jose (Madrid, Spain)

C. Stampfer (Aachen, Germany)

Efrat Shimoni (Tel Aviv, Israel)

Bart van Wees (Groningen, The Netherlands)

A. Vazquez de Parga (Madrid, Spain)

G. Vignale (Missouri, USA)

M. Vozmediano (Madrid, Spain)

A. Yacoby (Massachusetts, USA)



HQ-4. Fourth Conference on the History of Quantum Physics

July 15-18, 2015

Miramar Palace, Donostia/San Sebastian

www.ehu.eus/en/web/hq-4/home

Organizing/Scientific Committee

Alexander Blum (Max Planck Institute for the History of Science)

Christian Joas (Ludwig Maximilian Universität, München)

Christoph Lehner (Max Planck Institute for the History of Science)

Jaume Navarro (University of the Basque Country and Ikerbasque)

Jurgen Renn (Max Planck Institute for the History of Science)

Iñaki San Pedro (University of the Basque Country)

The last decade saw a surge in new scholarship on the history of quantum physics, built upon new sources, interpretations, and historiographical approaches. Three successful meetings in Berlin (2007), Utrecht (2008) and Berlin (2010) triggered a momentum of innovative projects and novel publications on the topic, which this conference followed and expanded upon. The Donostia International Physics Center (DIPC) and the Max Planck Institute for the History of Science (MPIWG) jointly organized the fourth edition of this series of conferences in Donostia/San Sebastian.

The meeting gathered scholars working on the history of quantum physics broadly understood from as many points of view as possible: from the conceptual to the sociological, from the institutional to the philosophical, from the academic to the popular.

Invited Speakers

Clayton A. Gearhart (St. John's University)

Blai Pié i Valls & Enric Pérez Canals (U. Barcelona)

Martha Cecilia Bustamante (U. Paris Diderot)

Arne Schirrmacher (Humboldt Universität)

Giora Hon (U Haifa)

Anthony Duncan & Michel Janssen (U Minnesota)

Martin Jähnert (MPIWG)

Christoph Lehner, Alex Blum, Martin Jähnert & Jurgen Renn (MPIWG)

Gonzalo Gimeno (U Autònoma Barcelona)

Nicolás Gaudenzi (UNAM)

Guido Bacciagaluppi & Elise (Crull & Owen Maroney)

Alexei Kojevnikov (UBC)

Alex Blum (MPIWG)

Aaron Sidney Wright (Harvard University)

Dennis Dieks (U Utrecht)

Arianna Borrelli (TU)

Alessio Rocci (U. of Padova)

María C. Boscà (U. of Granada)

Jean-Philippe Martinez (U. Paris Diderot)

Christian Joas (LMU)

Andrew Zangwill (Georgia Institute of Technology)

Kenji Ito (The Graduate University for Advanced Studies (Sokendai))

Asim Gangopadhyaya & Aleksandr Goltsiker. (U. of Loyola)

Roberto Lalli (MPIWG)

Shaul Katzir (U. of Tel Aviv)

Daniela Monaldi (York University)

An Rettig (U. of Regensburg)

Virgile Besson (U. Claude Bernard Lyon 1)

Thiago Hartz (Niels Bohr Archive)

Olival Freire Jr (Universidade Federal da Bahia)

International Symposia on (e,2e), Double Photo-ionization and Related Topics & Polarization and Correlation in Electronic and Atomic Collisions

July 30 - August 1, 2015

Miramar Palace, Donostia/San Sebastián

<http://e2epol.dipc.org/>

Chairmen

Ricardo Díez Muiño (DIPC, CFM CSIC-UPV/EHU)

Nikolay M. Kabachnik (Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University)

The *International Symposium on (e,2e), Double Photo-ionization and Related Topics* and the *18th International Symposium on Polarization and Correlation in Electronic and Atomic Collisions* were organized in San Sebastian as official satellite meetings of *ICPEAC 2015*. The merging of the two symposia into a single scientific event provided the opportunity to attend high-level specialized talks covering a broad range of hot topics in atomic and molecular physics. Among others, the following problems were discussed:

- Many-body interactions and electron-electron correlation effects in single and multiple ionization processes.
- Alignment and polarization effects in excitation and charge transfer processes.

International Scientific Committee

Ugo Ancarani (Université de Lorraine, Metz, France)

Lorenzo Avaldi (CNR-IMIP, Rome, Italy)

Klaus Bartschat (Drake University, Des Moines IA, USA)

Jamal Berakdar (Martin-Luther-Universität Halle-Wittenberg, Germany)

Nora Berrah (University of Connecticut, Storrs CT, USA)

Igor Bray (Curtin University, Perth, Australia)

Michael Brunger (Flinders University, Adelaide, Australia)

Xiangjun Chen (University of Science and Technology, Hefei, Anhui, China)

James Colgan (Los Alamos National Laboratory, Los Alamos NM, USA)

Alexander Dorn (Max-Planck-Institut für Kernphysik, Heidelberg, Germany)

Reinhard Dörner (Goethe-Universität, Frankfurt am Main, Germany)

Danielle Dowek (Université Paris Sud, Orsay, France)

Omar Ariel Fojón (Instituto de Física Rosario, Argentina)

Timothy Gay (University of Nebraska – Lincoln NE, USA)

Alexei N. Grum-Grzhimailo (Lomonosov Moscow State University, Moscow, Russia)

Nikolay Kabachnik (Lomonosov Moscow State University, Moscow, Russia)

Anatoli Kheifets (Australian National University, Canberra, Australia)

Murtadha Khakoo (California State University, Fullerton CA, USA)

George King (University of Manchester, UK)

Tom Kirchner (York University, Toronto, Canada)

Noriyuki Kouchi (Tokyo Institute of Technology, Tokyo, Japan)

Don H. Madison (Missouri S&T, Rolla MO, USA)

Fernando Martín (Universidad Autónoma de Madrid, Spain)

Michael Meyer (European XFEL, Hamburg, Germany)

Andrew Murray (University of Manchester, UK)

Roberto Rivarola (Instituto de Física Rosario, Argentina)

Michael Schulz (Missouri S&T, Rolla MO, USA)

Rajesh Srivastava (Indian Institute Of Technology Roorkee, Uttarakhand, India)

Al Stauffer (York University, Toronto, Canada)

Emma Sokell (University College Dublin, Ireland)

Masahiko Takahashi (Tohoku University, Sendai, Miyagi, Japan)

Kiyoshi Ueda (Tohoku University, Sendai, Miyagi, Japan)

Joachim Ulrich (Max-Planck-Institut für Kernphysik, Heidelberg, Germany)

Jim Williams (University of Western Australia, Perth, Australia)

Akira Yagishita (Photon Factory, Tsukuba, Japan)

Local Organizing Committee

Maite Alducin Ochoa (Centro de Física de Materiales CSIC-UPV/EHU & DIPC, Donostia/San Sebastián)

María Blanco-Rey (Departamento de Física de Materiales UPV/EHU & DIPC, Donostia/San Sebastián)

Iñaki Juaristi Oliden (Centro de Física de Materiales CSIC-UPV/EHU & DIPC, Donostia/San Sebastián)

Mohammed Ahmed Nosir (Centro de Física de Materiales CSIC-UPV/EHU, Donostia/San Sebastián)

Plenary Lecturers

Lorenz Cederbaum (University of Heidelberg, Germany)

Anatoli Kheifets (Australian National University, Canberra, Australia)

Giovanni Stefani (Università di Roma Tre, Rome, Italy)

Invited Speakers

Ugo Ancarani (Université de Lorraine, Metz, France)

Lorenzo Avaldi (CNR - Istituto di Struttura della Materia, Roma, Italy)

Klaus Bartschat (Drake University, Des Moines IA, USA)

Xiangjun Chen (University of Science and Technology, Hefei, Anhui, China)

James Colgan (Los Alamos National Laboratory, Los Alamos NM, USA)

Alexander Dorn (MPI für Kernphysik, Heidelberg, Germany)

Li Fang (University of Texas, Austin, TX USA)

Andreas Fischer (MPI für Kernphysik, Heidelberg, Germany)

Daniel Fischer (MPI für Kernphysik, Heidelberg, Germany)

Omar Ariel Fojon (Instituto de Física de Rosario, Argentina)

John Furst (University of Newcastle, Ourimbah, Australia)

Renaud Guillemin (Université Pierre et Marie Curie, Paris, France)

Leigh Hargreaves (California State University, Fullerton CA, USA)

Andrey Kazansky (Donostia International Physics Center, Donostia/San Sebastián, Spain)

Allen Landers (Auburn University AL, USA)
 Don H. Madison (Missouri S&T, Rolla MO, USA)
 Nicholas Martin (University of Kentucky, Lexington KY, USA)
 Tommaso Mazza (European XFEL, Hamburg, Germany)
 Laurent Nahon (SOLEIL Synchrotron, Gif-sur-Yvette, France)
 Kyo Nakajima (JASRI, Hyogo, Japan)
 Christophe Nicolas (SOLEIL Synchrotron, Gif-sur-Yvette, France)
 Alicia Palacios (Universidad Autónoma de Madrid, Spain)
 Béla Paripás (University of Miskolc, Hungary)
 Artem Rudenko (Kansas State University, Manhattan, KS, USA)
 Kirsten Schnorr (MPI für Kernphysik, Heidelberg, Germany)
 Michael Schulz (Missouri S&T, Rolla MO, USA)
 Olga Smirnova (Max Born Institute, Berlin, Germany)
 Emma Sokell (University College Dublin, Ireland)
 Al Stauffer (York University, Toronto, Canada)
 Andrey Surzhikov (Helmholtz-Institut Jena, Germany)
 Kiyoshi Ueda (Tohoku University, Sendai, Miyagi, Japan)
 Oleg Vasyutinskii (Ioffe Physical Technical Institute, St. Petersburg, Russia)
 Masakazu Yamazaki (Tohoku University, Sendai, Miyagi, Japan)
 Shaofeng Zhang (Institute of Modern Physics, Lanzhou, China)



Workshop MANA–DIPC “Nanostructures and Complex Functional Materials”

August 27–28, 2015

Donostia International Physics Center, Donostia/San Sebastián
http://dipc.ehu.es/ws_presentacion.php?id=123

Chairmen

Yutaka Wakayama (MANA)

Enrique Ortega (UPV/EHU, CFM CSIC-UPV, DIPC)

Workshop organized within the framework of the collaboration agreement between DIPC and the International Center for Materials Nanoarchitectonics (MANA) in Japan.

PRESENTATION

Prof. Pedro M. Echenique (UPV/EHU, DIPC)

Prof. Masakazu Aono (MANA)

NANOPHOTONICS SESSION

Tadaaki Nagao - MANA

Plasmonic Nanoarchitectonics for Energy Conversion

Javier Aizpurua - CFM CSIC-UPV/EHU, DIPC

Quantum effects in the optical response of plasmonic nano-antennas

Rainer Hillenbrand - CIC nanoGUNE, Ikerbasque

Nanoimaging and manipulation of plasmons in graphene

Peter Koval - DIPC

Ab-initio spectroscopy of large quantum systems

Atsushi Kubo - MANA

Evolution of surface plasmon wave packets in femtosecond time-domain

Yury Rakovich - CFM CSIC-UPV/EHU, Ikerbasque

Enhancement effects in hybrid organic/inorganic nanosystems:
 from resonant energy transfer to strong coupling

Ruben Esteban - DIPC

Topological insulator systems and strong coupling in light-matter interactions

SURFACES AND INTERFACES

Nacho Pascual - CIC nanoGUNE, Ikerbasque

The temperature of a single-molecule junction

Yoichi Yamada - MANA

Molecular-Scale and Macroscopic Properties of Organic Films

Iñaki Juaristi - CFM CSIC-UPV/EHU

Gas-Surface Dynamics Simulations

Yutaka Wakayama - MANA

STM study on solid-state reactions in binary molecular assemblies

Remi Petuya - DIPC

Bipolar conductance switching of anthradionaphene molecules

Seunjun Oh - MANA

Characterization and engineering of hybrid polymer-oxide semiconductor heterointerface

Guillaume Vasseur - DIPC

Full one-dimensional band dispersion in polymeric nanowires

Daniel Sánchez-Portal - CFM CSIC-UPV/EHU, DIPC

Semiconductor Surfaces: modelling from first principles

Takahiro Nagata - MANA

Crystallographic polarity effect of oxide on π conjugated system

Duncan Mowbray - DIPC

GW and BSE at the Interface: H_2O , CH_3OH , and Catechol on TiO_2

Tomoko Shimizu - MANA

Imaging Three-dimensional Surface Objects with Submolecular Resolution by Atomic Force Microscopy

Emilio Artacho - CIC nanoGUNE, Ikerbasque

Theoretical approaches to electrons in oxide surfaces

Yoshiyuki Yamashita - MANA

Hard X-ray Photoelectron Spectroscopy for Characterization of Advanced Materials

Celia Rogero - CFM CSIC-UPV/EHU

On the interfacial properties of solar cells

TRANSPORT IN NANOSTRUCTURES SESSION

Masakazu Aono - MANA

Observing the transport of electrons, polarons and ions at the nanometer scale

Thomas Frederiksen - DIPC, Ikerbasque

First-principles simulations of transport in nanoelectronics

Aran Garcia-Lekue - DIPC, Ikerbasque

Structural, electronic and transport properties of graphene nanostructures

Ion Errea - UPV/EHU, DIPC

Vibrational and superconducting properties of transition metal dichalcogenides from first-principles

Dario Bercioux - DIPC

Scattering Properties of Defected Carbon-Nanotubes

Miguel Cazalilla: National Tsing Hua University, DIPC

Spin Hall Effects in Graphene and Two-Dimensional Materials

Takashi Uchihashi - MANA

Surface Superconductors on Silicon: Atomic-Step Josephson Junctions and Molecular Hybrid Materials

Sebastian Bergeret - CFM CSIC-UPV/EHU, DIPC

Spin-dependent transport in superconducting hybrid structures

Misha Otkov - DIPC

Magnetic interactions at Ferromagnets/Topological Insulators interfaces

Summer School "Frontiers of Condensed Matter 2015"

August 31–September 11, 2015

Les Houches (France)

http://dipc.ehu.es/ws_presentacion.php?id=119

Organizing Committee

S. Bergeret (CFM CSIC-UPV/EHU, DIPC)

F. Hekking (Université Joseph Fourier, Grenoble)

J. Meyer (Université Joseph Fourier, Grenoble)

J. van Ruitenbeek (Leiden University)

This doctoral training session was organized jointly by the Physics Graduate School of Grenoble, by the Casimir Research School of Delft – Leiden (Netherlands) and the Donostia International Physics Center (DIPC) of San Sebastian (Spain). It aimed at offering final year Master students and junior Ph.D-students (1st/2nd year) a high-level training programme in the general area of condensed matter physics.

The session intended for experimentalists and theoreticians consisted of a series of pedagogical lectures, complemented by more specialized research seminars on timely topics. During the session, there was plenty of time for informal discussions between participants and lecturers. A poster session was organized, including a short oral presentation at the beginning of the session enabling the participants to present their research interests to each other.

Lecturers & Topics

S. Bergeret (CFM CSIC-UPV/EHU, DIPC) Spin-dependent transport in hybrid systems

J. Meyer (Université de Grenoble Alpes) Topological phases

Yu. Nazarov (Delft University of Technology, Université de Grenoble) Quantum Transport

J. Pekola (Aalto University, Université de Grenoble) Quantum thermodynamics

F. Pistolesi (Université de Bordeaux) Nanomechanics

L. Fritz (Utrecht University) Strongly correlated systems

Seminar Speakers

D. Basko (Université de Grenoble)

C. Bäuerle (Université de Grenoble)

P. Brouwer (Freie Universität Berlin)

F. Giazotto (Scuola Normale Superiore di Pisa)

R. Hanson (Delft University)

F. Hekking (Université de Grenoble)

J. van Ruitenbeek (Leiden University)

V. Vitelli (Leiden University)

The Ψ k 2015 Conference

September 6-10, 2015

Kursaal Congress Centre, Donostia/San Sebastian

<http://nano-bio.ehu.es/psik2015/>

Organizing Committee

Angel Rubio (UPV/EHU, Max Planck, DIPC)

Risto Nieminen (Aalto University School of Science)

The Ψ k 2015 Conference is the fifth in a series started in 1996 by the European electronic structure community. Every five years, this conference brings together the global community that is active in the science of electronic structure and properties of condensed matter. The conference is organized and supported by the Psi-k Network, and its programme covers both the fundamental and theoretical aspects of electronic structure calculations, computational methods and tools, in addition to applications to fundamental scientific and industrial and societal challenges. The application areas of electronic property calculations ranged from condensed matter and materials physics to nanoscience, chemistry, geophysics and biology, the design and discovery of novel materials, their properties, and their performance in devices (that is, to harvest, store, and convert energy) and to engineer new states of matter to advance fundamental and applied sciences.

Ψ k-2015 aimed to foster scientific exchange and outreach. With more than 1200 participants, it was a key event in the field, offering an intensive but enjoyable atmosphere in addition to a chance to explore the coastal city of San Sebastian.

Plenary Speakers

Giulia Galli (U. Chicago)

Georg Kresse (U. Vienna)

Steve Louie (UC Berkeley)

Ingrid Mertig (Martin Luther U., Halle)

Jörg Neugebauer (Max Planck, Düsseldorf)

30 Symposia with 160 Invited Speakers

Thirty Years of Car-Parrinello

Organized by Giulia Galli

Wanda Andreoni (EPFL, Lausanne), Christian Carbogno (Fritz Haber, Berlin),

Michele Ceriotti (EPFL, Lausanne), Robert DiStasio (Princeton U.), François Gygi (UC Davis),

Jürg Hutter (U. Zurich), Heather Kulik (MIT, Cambridge), Angelos Michelides

(London Centre for Nanotechnology), Minoru Otani (U. Tokyo), Annabella Selloni (Princeton U.)

GW and BSE

Organized by Rex Godby and Lucia Reining

Silke Biermann (CPHT, Palaiseau), Antonnio Sanna (Max Planck, Halle),

Francesco Sottile (ETSF, Palaiseau), Mark van Schilfgaarde (King's College, London)

f- electrons: "In memory of Walter Temmerman and his contributions to Psi-k and the electronic structure community"

Organized by Olle Eriksson, O. Andersson, Paul Durham and Silke Biermann

Xi Dai (CAS, Beijing), Nicola Lanata (Rutgers U., Piscataway), Alexander Shick (FZU, Prague),

Julie Staunton (U. Warwick, Coventry), Leonid Pourovskii (CPHT, Palaiseau)

Correlated Electrons

Organized by Markus Aichhorn, Silke Biermann, Massimo Capone, J. Kunes, and Eva Pavarini

Luca de'Medici (ESRF, Paris), Gianluca Giovannetti (SISSA, Trieste), Andy Millis (Columbia U., NY),

Eva Pavarini (FZ, Jülich), Jan Tomczak (TU, Wien); Martin Eckstein (Max Planck, Hamburg),

Philipp Hansmann (CPHT, Palaiseau), Alexey Rubtsov (Moscow State U.), Alessandro Toschi (TU, Wien)

Theoretical Spectroscopy

Organized by Zeila Zanolli and Hubert Ebert

Peter Blaha (TU, Wien), Maurits Haverkort (Max Planck, Dresden),

Jan Minar (LMU, Munich), Patrick Rinke (Aalto U., Esbo)

Recent Advances in Diagrammatic Methods for the Total Energy

Organized by Kristian Thygesen, Patrick Rinke, Georg Kresse and Mark Hybertsen

Garnet Chan (Princeton U.), Andreas Görling (UEN, Erlanger), Fred Manby (U. Bristol),

Thomas Olsen (TU Denmark, Lyngby), Xinguo Ren (UST China, Hefei)

Novel Density Functionals

Organized by Robert Di Stasio, John Dobson and Wanda Andreoni

Florian Eich (UM, Columbia), Paola Gori-Giorgi (VU, Amsterdam),

Per Hyldgaard (Chalmers UT, Göteborg), Karsten Jacobsen (TU Denmark, Lyngby),

Neepa Maitra (Hunter College, New York City), Alexandre Tkatchenko (Fritz Haber, Berlin)

Recent Developments in Density Matrix Functional Theory

Organized by Nicole Helbig and Heiko Appel

Dieter Bauer (Rostock U.), Ralph Gebauer (ICTP, Trieste), Sangeeta Sharma (Max Planck, Halle)

Density-Functional Theory for Coupled Matter-Photon Systems

Organized by Heiko Appel and Michael Ruggenthaler

Heiko Appel (Max Planck, Hamburg) and Michael Ruggenthaler (U. Innsbruck),

Kay Dewhurst (Max Planck, Halle), Eberhard Engel (GU Frankfurt),

Ivano Tavernelli (EPFL, Lausanne), Robert van Leuuwen (JYU, Jyväskylä)

Applications of Quantum Monte Carlo Methods

Organized by Matthew Foulkes

Ali Alavi (U. Cambridge), Ethan Brown (RPI, Troy), Ronald Cohen (CIW, Washington, D.C.),

Elif Ertekin (UI, Urbana-Champaign), Leonardo Guidoni (USA, L'Aquila), Sandro Sorella (SISSA, Trieste),

Shiwei Zhang (CWM, Williamsburg), Lucas Wagner (UI Urbana-Champaign)

Upscaling Electronic Structure: Reduced-Scaling and Multi-Scale Methods

Organized by Peter Haynes, Volker Blum, Stefan Goedecker, Javier Junquera, Karsten Reuter,

Jorg Neugebauer, Matthias Scheffler and Mike Finnis

Daniel Berger (UC Los Angeles), Luigi Genovese (CEA, Grenoble),

Lin Lin (UC Berkeley), Cedric Weber (King's College, London), Bill Curtin (Brown U., Providence),

Karsten Reuter (TU Munich), Dallas R. Trinkle (UI Urbana-Champaign)

Spin-Orbit Coupling Effects in First-Principles Quantum Transport

Organized by Ingrid Mertig, Paul Kelly, and David Vanderbilt

Frank Freimuth (F. Jülich), Martin Gradhand (U. Bristol), Diemo Koedderitzsch (LMU, Munich), Qian Niu (UT Austin), Jairo Sinova (JGU, Mainz), Zhe Yuan (JGU, Mainz)

Magnetic excitations and magnetization dynamics

Organized by Ingrid Mertig, Stefan Blugel and Olle Eriksson

Marco Battiato (U. Wien), Hardy Gross (Halle), Johannes Lischner (UC Berkeley), Samir Lounis (JGU, Mainz)

Chiral Magnetism

Organized by Stefan Blugel

Stefan Heinze (U. Kiel), Yuriy Mokrousov (F. Jülich), Manuel Pereiro (Uppsala U.), Laszlo Udvardi (Budapest U.)

First-Principles Calculations for Multiferroics and Magnetoelectrics

Organized by Nicola Spaldin and Silvia Picozzi

Eric Bousquet (U. Liege), Lars Nordstrom (Uppsala U.), Massimiliano Stengel (CSIC, Barcelona)

Ab Initio Statistical Mechanics

Organized by Luca Ghiringhelli, Matthias Scheffler and Berand Smit

Tilmann Hickel (Max Planck, Düsseldorf), Roberto Car (Princeton U.), Olle Hellman (Linköping U.), Alessandro da Vita (King's College, London), Ralf Drautz (RU Bochum), George Booth (U. Cambridge)

Topological Insulators

Organized by David Vanderbilt and Ingrid Mertig

Irene Aguilera (F. Jülich), Liang Fu (MIT, Cambridge), Kevin Garrity (NIST, Washington, D.C.), Jürgen Henk (F. Jülich)

Electrochemical Energy Storage and Conversion: Solid/Liquid Interfaces

Organized by Marialore Sulpizi, Marie-Pierre Gaigeot and Axel Gross

Kevin Leung (Sandia National Laboratories, Albuquerque), Marie-Liesse Doublet (U. Montpellier), Adam Foster (Aalto U., Esbo); Axel Gross (Aachen U.), Michiel Sprik (U. Cambridge), Mira Todorova (Max Planck, Düsseldorf), Enge Wang (CAS, Beijing)

Materials Design

Organized by Nicola Marzari

Thomas Bligaard (Denmark TU, Lyngby), Richard Needs (U. Cambridge), Berend Smit (UC Berkeley), David Vanderbilt (Rutgers U., Piscataway), Chris Wolverton (Northwestern U., Evanston); Kristin Persson (Linköping U.), Giovanni Pizzi (EPFL, Lausanne)

Machine Learning Methods in Materials Modeling

Organized by Gabor Csanyi and Alex Tkatchenko

Jörg Behler (RU Bochum), Gabor Csanyi (U. Cambridge), Luca Ghiringhelli (Fritz Haber, Berlin), Anatole von Lilienfeld (U. Basel)

Hybrid Photovoltaic Materials

Organized by Wanda Andreoni

Filippo de Angelis (U. Perugia), Feliciano Giustino (U. Oxford), Andrew Rappe (UPenn, Philadelphia), Paolo Umari (U. Padova)

Electron Phonon Coupling and Thermoelectricity

Organized by Christian Carbogno, Nicola Marzari, and Matthieu Verstraete

Lilia Boeri (Max Planck, Graz), Nicola Bonini (King's College, London), Claudia Draxl (Humboldt U., Berlin), Gianni Profeta (U. L'Aquila)

Ultrafast Charge Transfer at the Nanoscale

Organized by Stefan Kurth, Robert van Leeuwen, and Gianluca Stefanucci

Oleg Prezdho (U. Rochester), Carlo Rozzi (U. Modena)

Non-Linear Optics of Materials and Nanoplasmonics

Organized by Elisa Molinari, Risto Nieminen, Claudio Attacalite, Myrta Gruning, and V. Venard

Stefano Corni (U. Modena), Pablo Garcia (with FJ García Vidal) (UAM, Madrid), Alberto Castro (FU Berlin), Stefano Ossicini (U. Modena), Kazuhiro Yabana (U. Tsukuba)

Novel 2D Materials and Heterostructures

Organized by Kristian Thygesen, Stefano Sanvito, Paul Kelly, Nicola Marzari, Adam Kiejna

Geert Brocks (U. Twente), Matteo Calandra (UPMC, Paris), Mei-Yin Chou (GA Tech, Atlanta), Arkady Krasheninnikov (U. Helsinki), Tony Low (UMN, Minneapolis), Esa Räsänen (Tampere UT)

Modeling of Defect Levels

Organized by Chris van de Walle

Audrius Alkauskas (CPST, Vilnius), Hannu-Pekka Komsa (U. Helsinki), Sergey Levchenko (Fritz Haber, Berlin), Alfredo Pasquarello (EPFL, Lausanne)

Transport Properties

Organized by Kiyoo Terakura, Hardy Gross, and Feng Yuang Ping

Stefan Kurth (UPV/EHU, Donostia/San Sebastián), Jeff Neaton (UC Berkeley), Giovanni Vignale (UM Columbia), Chun Zhang (NU Singapore)

Matter Under Extreme Conditions

Organized by Hardy Gross and Angel Rubio

Dario Alfe (University College London), Kieron Burke (UC Irvine), Yanming Ma (JLU, Jilin), and Ronald Redmer (U. Rostock)

Electronic Structure Theory for Biophysics

Organized by Carsten Baldauf, Leonardo Guidoni and Gerrit Groenhof

Carsten Baldauf (Fritz Haber, Berlin), Jochen Blumberger (U. College London), Daniele Bovi (SU Rome), Ville Kaila (TU Munich), Johannes Neugebauer (WWU, Munster), Ursula Röthlisberger (EPFL, Lausanne)

Special Session: Ψk Volker Heine Young Investigator Award

5 invited talks by the finalists: Andreas Grueneis (Max Planck Stuttgart), Fabio Caruso (University of Oxford) Ion Errea (UPV/EHU, DIPC), Marco Bernardi (UC Berkeley, LBNL), Johanna Fuks (Hunter College)

JCNS Workshop 2015: Neutron Scattering on Nano-Structured Soft Matter: Synthetic and Bio-Materials

October 5-8, 2015

Tutzing, Germany

http://dipc.ehu.es/ws_presentacion.php?id=122

Organizers

Dieter Richter (Jülich Centre for Neutron Science)

Juan Colmenero (CFM CSIC-UPV/EHU, DIPC)

In the tradition of the annual international JCNS workshops, the Jülich Centre for Neutron Science (JCNS) and the Donostia International Physics Center (DIPC) jointly organized the workshop in 2015.

Neutrons are a key probe providing deep insight into the structure and dynamics and thus in the functioning of synthetic and living soft matter. The workshop discussed the current status, future trends and opportunities of neutron scattering also in combination with simulations.

The topics addressed were:

Functional Polymers

Soft Matter out of Equilibrium

Nano-Composites and Confinement

Nanostructured Complex Fluids

Membranes and Proteins

Soft Matter Materials for Energy Devices

Invited Speakers

Arantxa Arbe (DIPC)

Lise Arleth (University of Copenhagen)

Deborah Berti (University of Florence)

Joao Cabral (Imperial College London)

Stefan Egelhaaf (University of Düsseldorf)

Hitoshi Endo (Japan Atomic Energy Agency)

Henrich Frielinghaus (JCNS)

Thomas Hellweg (University of Bielefeld)

John Katsaras (Oak Ridge National Laboratory)

Tad Koga (Stony Brook University)

Reidar Lund (University of Oslo)

Angel J. Moreno (DIPC)

Kell Mortensen (University of Copenhagen)

Peter Müller-Buschbaum (TUM)

Julian Oberdisse (Université Montpellier 2)

Andrew Parnell (University of Sheffield)

Wolfgang Paul (University of Halle)

Wim Pyckhout-Hintzen (JCNS)

Frank Schreiber (University of Tübingen)

Peter Schurtenberger (Lund University)

Sebastian Seiffert (HZB)

Mitsuhiro Shibayama (University of Tokyo)

Karen Winey (University of Pennsylvania)

21st International Workshop on Inelastic Ion-Surface Collisions (IISC-21)

October 18-23, 2015

Donostia/San Sebastián, Spain

<http://iisc21.dipc.org/>

Conference Chair

Iñaki Juaristi (CFM CSIC-UPV/EHU, DIPC)

International Scientific Committee

G. Andersson (Flinders University, South Australia, Australia)

F. Aumayr (TU Wien, Inst. of Applied Physics, Austria)

R. Hoekstra (ARCNL, Amsterdam, The Netherlands)

S. Facsko (Helmholtz-Zentrum Dresden-Rossendorf, Germany)

I. Juaristi (University of Basque Country, UPV/EHU, Spain)

K. Kimura (Kyoto University, Japan)

T. Koshikawa (Osaka Electro-Communication University, Japan)

H. Lebius (CIMAP/GANIL, Caen, France)

Ch. Linsmeier (Forschungszentrum Jülich GmbH, Germany)

F. Meyer (Oak Ridge National Laboratory, USA)

J. Pomeroy (NIST, USA)

P. Roncin (ISMO/CNRS, France)

M. Schleberger (University of Duisburg-Essen, Germany)

Local Organizing Committee

Maite Alducin (CFM-CSIC/UPV)

Andrés Arnau (UPV/EHU, DIPC)

María Blanco Rey (UPV/EHU, DIPC)

Ricardo Díez Muiño (DIPC, CFM-CSIC/UPV)

Ivor Lončarić (CFM CSIC/UPV)

Dino Novko (DIPC)

IISC21 was the 21st edition of a series of meetings that started in 1976 in the Bell Labs, Murray Hill, New Jersey, USA. The International Workshop on Inelastic Ion Surface Collisions covered the fundamental aspects of the inelastic interactions of particles with surfaces. It included the following topics:

- Energy loss of particles at surfaces
- Charge exchange between particles and surfaces
- Electron, photon and secondary ion emission due to particle impact on surfaces
- Ion induced desorption, electronic and kinetic sputtering
- Defect formation, surface modification and nanostructuring
- Laser induced desorption. Scattering of atoms, ions, molecules and clusters
- Sputtering, fragmentation, cluster and ion formation in SIMS
- SNMS Cluster/Molecular and highly charged ion beams

Plenary speakers

Gunther Andersson, Flinders University, Australia
Torgny Gustafsson, Rutgers University, USA
Hermann Nienhaus, Universitat Duisburg-Essen, Germany
Thomas Schwarz-Selinger, IPP Garching, Germany
Helmut Winter, Humboldt Universität, Germany

Invited Speakers

Harriet Ahlgren, University of Helsinki, Finland
Frederic Allegrini, Southwest Research Institute, USA
Paola Atkinson, Institut des Nanosciences de Paris, France
Brigitte Ban d'Etat, CIMAP/GANIL, Caen, France
Mark E. Bannister, Oak Ridge National Laboratory, USA
Andrei Borissov, Université de Paris-Sud, France
Peter Bauer, Johannes Kepler Universität, Austria
Bernhard Berger, Technische Universität Wien, Austria
Roman Böttger, Helmholtz-Zentrum Dresden-Rossendorf, Germany
Catia Costa, University of Surrey, UK
Pedro Miguel Echenique Landiribar, Universidad del País Vasco (UPV/EHU), DIPC, Spain
Clara Grygiel, CIMAP/GANIL, Caen, France
Charlotte Herbig, Universität zu Köln, Germany
Hussein Hijazi, Oak Ridge National Laboratory, USA
Maarten van Kampen, ARC NL, The Netherlands
Roland Kozubek, Universitat Duisburg-Essen, Germany
Rafael Martínez Rodríguez, Universidade Federal do Amapá, Brasil
Rosa Monreal, Universidad Autónoma de Madrid, Spain
Kaoru Nakajima, Kyoto University, Japan
Philippe Roncin, Université de Paris-Sud, France
Peter Sigmund, University of Southern Denmark, Denmark
Taku Suzuki, NIMS, Japan
Richard A. Wilhelm, Helmholtz-Zentrum Dresden-Rossendorf, Germany
Yasushi Yamauchi, NIMS, Japan

4th Baskrete Open Days to Industry

November 23-24, 2015

Donostia International Physics Center, Donostia/San Sebastián
http://dipc.ehu.es/ws_presentacion.php?id=125

Organizer

Andres Ayuela (CFM CSIC-UPV/EHU, DIPC)
Jorge S. Dolado (Tecnalia)

The BASKRETE initiative is a collaborative project within the Campus of International Excellence Euskampus carried out between the Basque University (UPV/EHU), the Materials Physics Center (MPC), Donostia International Physics Center (DIPC) and TECNALIA with a twofold mission: On the one hand, BASKRETE will coordinate all the actions which are currently underway in the Basque Country in the field of nanoscience and nanotechnology for cementitious materials. On the other hand, BASKRETE aims to trigger the transfer of high technology knowledge to companies through the establishment of a cooperative program with the industrial agents.

Program

Welcome (P.M. Echenique UPV/EHU, DIPC and R. Díez Muiño, CFM CSIC-UPV/EHU, DIPC)

NanoBasque Initiative (A. Martínez Muro; Nanobasque-SPRI)

BASKRETE initiative (J.S. Dolado, TECNALIA R&I)

An industrial output: NanoSeeds (A. Aramburu, TECNALIA VENTURES)

Dissolution of C3S (H. Manzano, UPV/EHU)

Nanowollastonite formation (J.J. Gaitero, TEC)

CSH seeds obtained from by-products (J.S. Dolado, TEC)

A new model of cement Setting (A. Prabhu, TEC)

Ca(OH)₂ under pressure (R. Dupuis, DIPC)

Water dynamics in Tobermorite and CSH (S. Cervený, MPC)

New challenges in valorization of Slag (A. Santamaría, UPV/EHU)

INDUSTRIAL EXAMPLES

Strength retrogression: stability of C2SH (R. Dupuis, DIPC)

Aerogels for Thermal efficiency in Concrete (E. Goiti, TEC)

Synthesis of Superplasticizers (I. Emaldi, POLYMAT)

Anomalous and Normal T11 under pressure (A. Ayuela, DIPC)

C-S-H nanoparticles synthesized by Super Critical Fluid Technology (M. Díez, UPV/EHU and University of Bordeaux)

Euskampus-Bordeaux Symposium

November 26-27, 2015

Donostia/San Sebastián

www.ehubaq.eu/symposium2015/home

This was the second symposium co-organized by the University of Bordeaux and the Euskampus Aggregation (University of the Basque Country, Tecnalia and Donostia International Physics Center (DIPC) within the framework of the Bordeaux-Euskampus Euro-regional Campus of International Excellence.

The Bordeaux-Euskampus Symposium is an event which contributes to structuring and consolidating collaboration between the two academic and university communities, as well as with social stakeholders and organisations whose projects and activities are a key part of the knowledge triangle in the Euro-region of Aquitaine - the Basque Country.

The symposium's program featured 6 types of session or activity:

Plenary sessions: keynote presentation and short presentations on collaborative actions between Bordeaux-Euskampus.

Sessions and activities by and for the community of PhD students: currently in the process of completing a co-supervised or co-tutored thesis; training workshop in transversal competences, poster competition, etc.

Scientific sessions: the aim of these sessions is to establish and consolidate collaborative initiatives focusing on specific themes related to research, value and training. They were designed and coordinated by pairs of researchers from the Bordeaux-Euskampus communities.

Administrative sessions: aimed to structurally facilitate the dynamics of collaboration. They focused on sharing the lessons learned during the experience, as well as on harmonising and improving collaborative procedures between the administrative structures of the two universities.

Quadruple Helix Oriented Sessions: These featured current strategic initiatives to mobilise partners in the Basque Country and Aquitaine. They were made up of representatives of the scientific community, as well as local stakeholders including the authorities, businesses and so on. Their aim was to foster cooperation to elicit local responses to global challenges.

Modelling and Representation. How to make world(s) with symbols

December 10-12, 2015

Donostia International Physics Center, Donostia/San Sebastián

<http://www.ehu.es/en/web/worldmaking2015>

Scientific Committee

Catherine Elgin (Harvard)

Paul Humphreys (University of Virginia)

Andoni Ibarra (UPV/EHU)

Thomas Mormann (UPV/EHU)

Hans-Jörg Rheinberger (Max Planck Institute for the History of Science)

Invited Speakers

Catherine Elgin (Harvard)

James Griesemer (UC Davis)

Andoni Ibarra (UPV/EHU)

Tarja Knuuttila (Helsinki Collegium/South Carolina)

Thomas Mormann (UPV/EHU)

Jay Odenbaugh (Lewis & Clark)

Christopher Pincock (Ohio State)

Hans-Jörg Rheinberger (Max Planck Institute for the History of Science)

Iñaki San Pedro (UPV/EHU)

Eric Winsberg (South Florida)