

DINAMO 2015

Discussions on Nano & Mesoscopic Optics

April 8-12, 2015. El Chaltén, Patagonia. Argentina

Program

Tuesday, April 7th

6:00pm	Registration opens at the main Lobby
6:00pm - to 10:00pm	Welcome Reception

Wednesday, April 8th

7:00 am - 8:15 am	Breakfast
8:15 am	Opening
8:30 am - 9:00am	Jeremy J. Baumberg , University of Cambridge, UK <i>PLASMONICS IN THE SUB-NM AND QUANTUM DOMAINS</i>
9:00 am - 9:30 am	Francesco Pedaci , CNRS, Montpellier, France <i>SINGLE - MOLECULE ANGULAR MANIPULATION AND DYNAMICS</i>
9:30am - 10: 00am	Andrea Bragas , Universidad de Buenos Aires, Argentina <i>HIGH-EFFICIENCY SECOND HARMONIC GENERATION AT THE NANOSCALE</i>
10:00 am - 10:30 am	Coffee Break
10:30 am - 11:00 pm	Remi Carminati , CNRS, Paris, France <i>CORRELATIONS IN OPTICAL SPECKLES: NEW THINGS IN AN OLD TOPIC</i>
11:00 am - 11:30 am	Scott Carney , University of Illinois, USA <i>NANOHOLOGRAPHY: COHERENT MULTIPLEX IMAGING IN THE NEAR-FIELD</i>
11:30 am - 12:00 pm	Eduardo Coronado , Universidad Nacional de Córdoba, Argentina DESIGN OF PLASMONIC NANOSTRUCTURES FOR OPTIMIZING SERS
12:00 pm - 12:20 pm	Manuel Marqués , Universidad Autónoma de Madrid, Spain THE MECHANICAL ACTION OF THE SPIN CURL OPTICAL FORCES
12:30 pm - 3:30 pm	Lunch and trekking

- 3:30 pm - 4:00 pm **Aristide Dogariu**, University of Central Florida, USA
ACTION AND SENSING WITH COMPLEX OPTICAL FIELDS
- 4:00 pm - 4:30 pm **Alejandro Fainstein**, Instituto Balseiro & Centro Atómico Bariloche, Argentina
OPTOMECHANICS IN GAAS VERTICAL PILLAR DBR CAVITIES
- 5:00 pm - 5:30 pm** **Coffee Break**
- 5:30 pm - 6:00 pm **Ernst-Ludwig Florin**, University of Texas at Austin, USA
NANOSCOPIC IMAGING OF BIOPOLYMER NETWORKS WITH 3D THERMAL NOISE IMAGING
- 6:00 pm - 6:30 pm **Monika Fleischer**, Universität Tübingen, Germany
PLASMONIC NANOANTENNAS IN HYBRID CONFIGURATIONS
- 6:30 pm - 7:00 pm **Jochen Feldmann**, Ludwig-Maximilians-Universität, Germany
GOLD NANOPARTICLES: UTILIZING PLASMONIC HEATING AND OPTICAL FORCES FOR PHOTONIC APPLICATIONS
- 7:00 pm - 7:30 pm** **First Poster Ads.**
- Martin Bordenave**, (CIBION), Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina
FAR-FIELD OPTICAL NANOSCOPY APPLIED TO NEUROBIOLOGY
- Emiliano Cortes**, Imperial College
NANOPARTICLE-ASSISTED STIMULATED-EMISSION-DEPLETION NANOSCOPY (NP-STED)
- Martín Abraham Ekeroth**, Universidad Nacional del Centro de la Provincia de Buenos Aires, Argentina
OPTICAL FORCES AND TORQUES EXERTED ON PLASMONIC NANOTUBES AND DIMERS OF NANOWIRES
- Nuno de Sousa**, Universidad Autónoma de Madrid, Spain
EFFECT OF LONG-RANGE SPATIAL CORRELATIONS ON THE LIFETIME STATISTICS OF AN EMITTER IN A TWO-DIMENSIONAL DISORDERED LATTICE
- Gustavo Grinblat**, Universidad de Buenos Aires, Argentina
SINGLE SEMICONDUCTOR NANOWIRE COUPLED TO A METALLIC NANOANTENNA FOR HIGH EFFICIENCY

SECOND HARMONIC GENERATION

8:00 pm - 9:00 pm

Dinner

9:15 pm – onwards

First Electronic Poster Session

Thursday, April 9th

7:00 am - 8:30 am

Breakfast

8:30 am - 9:00am

John Lupton, Universität Regensburg, Germany
NON-LINEAR CONTINUUM GENERATION IN SILVER
NANOPARTICLE HOT SPOTS

9:00 am - 9:30 am

Monika Ritsch-Marte, Innsbruck Medical Univ., Austria
ARE OPTICAL TWEEZER FORCES RELEVANT IN
ASTROPHYSICS?

9:30am - 10: 00am

Ulrich Hohenester, University of Graz, Austria
TOMOGRAPHY OF PARTICLE PLASMON FIELDS USING
ELECTRON ENERGY LOSS SPECTROSCOPY

10:00 am - 10:30 am

Coffee Break

10:30 am - 11:00 pm

Javier Aizpurúa, CSIC-UPV/EHU, and DIPC, Spain
MIND THE GAP!

11:00 am - 11:30 am

Francisco García Vidal, Universidad Autónoma de
Madrid, Spain
TRANSPORT AND HARVESTING OF EXCITONS MEDIATED
BY STRONG COUPLING

11:30 am - 12:00 pm

Fernando Stefani, Universidad de Buenos Aires,
Argentina

12:00 pm - 12:20 pm

Francisco Moreno Gracia, Universidad de Cantabria,
Spain
ON THE SPECTRAL RESPONSE OF DIPOLE
NANOANTENNAS IN THE FAR AND NEAR-FIELD REGIMES

12:30 pm - 3:30 pm

Lunch and trekking

3:30 pm - 4:00 pm

Pieter G. Kik, University of Central Florida, USA
NANOPARTICLE GAP PLASMONS: THE IDEAL PROBE OF
NANOSCALE ELECTRONIC AND OPTICAL PHENOMENA?

4:00 pm - 4:30 pm

Daniel Lanzillotti Kimura, Laboratoire de Photonique et
de Nanostructures, France
NANOMECHANICS AND OPTOPHONONICS IN THREE-
DIMENSIONAL NANOSTRUCTURES

5:00 pm - 5:30 pm

Coffee Break

5:30 pm - 6:00 pm

Pedro García-Fernández, University of Copenhagen,
Denmark
ANDERSON LOCALIZATION IN LOW-DIMENSIONAL
STRUCTURES TO ENHANCE LIGHT-MATTER
INTERACTION

6:00 pm - 6:30 pm

José Ignacio Pascual, Nanogune Donostia, Spain
LIGHT EMISSION FROM A "HOT" TUNNELING JUNCTION

6:30 pm - 7:00 pm

Mikael Käll, Chalmers University of Technology,
Gothenburg, Sweden
PLASMON ENHANCED INTERNAL PHOTOEMISSION IN
ANTENNA/SPACER/MIRROR BASED Au/TiO₂
NANOSTRUCTURES

7:00 pm - 7:30 pm

Second Poster Ads

José A. Sánchez-Gil, Consejo Superior de
Investigaciones Científicas (IEM-CSIC), Madrid, Spain
LIGHT EMISSION, SCATTERING AND ABSORPTION IN
METAL AND SEMICONDUCTOR NANOWIRES DRIVEN BY
FABRY-PEROT AND/OR MIE RESONANT MODES

Alberto Scarpetтини, Universidad Tecnológica Nacional,
Campana, Argentina
COVERAGE OF GLASS SUBSTRATES WITH GOLD
NANORODS

Sebastián Anguiano, Instituto Balseiro, Bariloche,
Argentina
ULTRA-HIGH RESOLUTION SPECTROSCOPY OF
OPTOMECHANICAL MODES IN DBR-BASED
SEMICONDUCTOR MICRORESONATORS

Luis Hita, Universidad Autonoma de Madrid, Spain
THEORETICAL ANALYSIS OF DIMERS' DIFFUSION IN
OPTICAL LATTICES

8:00 pm - 9:00 pm

Dinner

9:15 pm – onwards

Second Electronic Poster Session

Friday, April 10th

7:00 am - 8:30 am

Breakfast

9:00 am - 5:00 pm

Excursion to Lago del Desierto

5:00 pm - 5:30 pm

Coffee Break

5:30 pm - 6:00 pm

Otto Muskens, University of Southampton, UK
A MESOSCOPIC APPROACH TO CONTROLLING THE
FLOW OF LIGHT IN INTEGRATED OPTICS

6:00 pm - 6:30 pm

Guillermo Acuña, Technische Universität Braunschweig,
Germany
DNA ORIGAMI NANOPHOTONICS: PLASMONICS AND
FLUORESCENCE ENHANCEMENT

6:30 pm - 7:00 pm

Norbert F. Scherer, University of Chicago, USA
THE NATURE OF OPTICAL MATTER

7:00 pm - 7:30 pm

Third Poster Ads

Martin Caldarola, Universidad de Buenos Aires,
Argentina
LASER INDUCED HEAT MAPPING IN SILICON AND GOLD
NANOANTENNAS
Cynthia Vidal, University Linz, Austria
SINGLE GOLD NANOSPONGES: A NOVEL PLASMONIC
MATERIAL

Richard Wollhofen, University Linz, Austria
SUB 100 NM STED LITHOGRAPHY

Mauro D. Cocco, Instituto Balseiro, Bariloche,
Argentina
PLASMONIC NANOANTENNAS: BOTTOM-UP VERSUS
TOP-DOWN APPROACHES

8:00 pm - 9:00 pm

Dinner

9:15 pm – onwards

Third Electronic Poster Session

Saturday, April 11th

7:00 am - 8:30 am

Breakfast

8:30 am - 9:00am

Philip Tinnefeld, Technische Universität Braunschweig,
Germany
DNA ORIGAMI NANOPHOTONICS: FROM
SUPERRESOLUTION TO FUNCTIONAL DEVICES

9:00 am - 9:30 am

Stefan Maier

9:30am - 10: 00am

Manuel Nieto-Vesperinas, ICMM-CSIC, Madrid, Spain
OPTOMECHANICS OF THE ANGULAR MOMENTUM OF
LIGHT

10:00 am - 10:30 am

Coffee Break

10:30 am - 11:00 pm

Oscar Martínez, Universidad de Buenos Aires,
Argentina
3D MICROSCOPIC IMAGING, HOW FAR CAN WE GO?

11:00 am - 11:30 am

Christiane Höppener, University of Münster, Germany
ANTENNA-ENHANCED LUMINESCENCE WITH
COLLOIDAL NANOPARTICLE ANTENNAS

- 11:30 am - 12:00 pm **Helmut Ritsch**, University of Innsbruck, Austria
SELF-ORDERING AND ADAPTIVE LIGHT COLLECTION BY
MOBILE SCATTERERS IN RESONATORS
- 12:00 pm - 12:20 pm **Won Seok Chang**, Gajeong-ro Yuseong-gu, Daejeon,
Korea
SPATIALLY RESOLVED MAPPING OF NANOSCALE
GRATING STRUCTURED ZNO
- 12:30 pm - 3:30 pm** **Lunch and trekking**
- 3:30 pm - 4:00 pm **H. Rubinsztein-Dunlop**, University of Queensland,
Brisbane, Australia
ATOM-OPTOMECHANICAL HYBRID SYSTEM
- 4:00 pm - 4:30 pm **Peter Johansson**, Chalmers University of Technology,
Sweden
ULTRAFast SPINNING OF NANOPARTICLES USING
CIRCULARLY POLARIZED LIGHT
- 4:30 pm - 5:00 pm **Frank Scheffold**, University of Fribourg, Switzerland
HYPERUNIFORM DISORDERED PHOTONIC MATERIALS
WITH A PRONOUNCED GAP IN THE SHORTWAVE
INFRARED
- 5:00 pm - 5:30 pm** **Coffee Break**
- 5:30 pm - 6:00 pm **Onofrio Marago**, CNR-IPCF, Messina, Italy
OPTICAL TRAPPING OF NANOSTRUCTURES: ROLE OF
SHAPE AND SPECTROSCOPY
- 6:00 pm - 6:30 pm **Sergey Skipetrov**, CNRS, Grenoble, France
NEAR-FIELD EFFECTS COMPROMISE ANDERSON
LOCALIZATION OF LIGHT
- 6:30 pm - 7:00 pm **Niek van Hulst**, ICFO, Barcelona, Spain
QUANTUM NANO-OPTICS IN SINGLE LIGHT HARVESTING
COMPLEXES
- 7:00 pm - 7:30 pm** **Fourth Poster Ads.**
Julian Gargiulo, (CIBION), Consejo Nacional de
Investigaciones Científicas y Técnicas, Argentina
FABRICATING PLASMONIC WAVEGUIDES AND
RESONANT STRUCTURES BY LASER PRINTING OF SINGLE

NANOPARTICLES

Mathieu L. Juan, Macquarie University, Australia
CONVENTIONAL OPTICAL TWEEZERS WITH A QUANTUM
PUSH

Fábio Lombardi Maximino, Universidade de São Paulo,
Brazil

INTERFERENCE OF THE ROUGHNESS IN PROPAGATION
OF SURFACE PLASMON ON AU FILMS

Federico Barabas, (CIBION), Consejo Nacional de
Investigaciones Científicas y Técnicas, Argentina
MAPPING PLASMONIC NEAR-FIELDS WITH PAINT

8:00 pm - 9:00 pm

Dinner

9:15 pm – onwards

Fourth Electronic Poster Session

Sunday, April 12th

7:00 am - 8:30 am

Breakfast

8:30 am - 9:00am

Rainer Hillenbrand, Nanogune, Donostia, Spain
TWO-DIMENSIONAL OPTICS WITH GRAPHENE
PLASMONS

9:00 am - 9:30 am

Gabriel Molina Terriza, Macquarie University, Sydney, Australia
PROBING NANOSTRUCTURES WITH THE ANGULAR
MOMENTUM AND THE HELICITY OF LIGHT

9:30am - 10: 00am

Silvia Vignolini, University of Cambridge, UK
CELLULOSE PHOTONICS: FROM NATURE TO
APPLICATION

10:00 am - 10:30 am

Coffee Break

10:30 am - 11:00 pm

Alex Weber-Bargioni, Material Science Devison LBNL, Berkeley, USA
MAPPING OPTOELECTRONIC PROCESSES AT THE NATIVE
LENGTH SCALE IN ORGANIC AND INORGANIC NANO
COMPOSITES

11:00 am - 11:30 am

Ulrike Woggon, Technische Universität, Berlin, Germany
COHERENT PHOTONICS WITH QUANTUM DOTS

11:30 am - 11:50 pm

Nicolás Muller, University of Fribourg, Fribourg, Switzerland
TITANIA 3D WOODPILE PHOTONIC CRYSTALS FOR
NEARLY-COMPLETE BAND GAP MATERIALS

12:30 pm - 3:30 pm

Lunch and trekking

- 3:30 pm - 4:00 pm **Pavel Zemánek**, Institute of Scientific Instruments, Academy of Sciences, Czech Republic
OPTICALLY SELF-ARRANGED AND PROPELLED MICROSTRUCTURES
- 4:00 pm - 4:30 pm **Galo Soler Illia**, Centro Atómico Constituyentes, Comisión Nacional de Energía Atómica, Argentina
MESOPOROUS THIN FILMS: FROM RESPONSIVE PHOTONIC CRYSTALS TO METAL-OXIDE NANOCOMPOSITES WITH TUNABLE PLASMONIC PROPERTIES
- 4:30 pm - 5:00 pm **Georg Maret**, Universität Konstanz, Germany
INTERPLAY BETWEEN NONLINEARITIES AND ANDERSON LOCALIZATION OF LIGHT
- 5:00 pm - 5:30 pm** **Coffee Break**
- 5:30 pm - 6:00 pm **Gabriel Cwilich**, Yeshiva University, USA
DETERMINING SUBWAVELENGTH DISTANCES BETWEEN POINT LIGHT EMITTERS IN A TURBID ENVIRONMENT FROM NOISE AND CORRELATIONS MEASUREMENTS: SPECKLE CONTRAST MICROSCOPY
- 6:00 pm - 6:30 pm **Stephane Kena-Cohen**, Imperial College/Polytechnique Montreal, Canada
STRONG LIGHT-MATTER COUPLING WITH MOLECULES, MONOLAYERS AND METALS
- 6:30 pm - 7:00 pm **Juan José Saenz**, UAM, Madrid & DIPC, San Sebastián, Spain
CONTROLLING DISPERSION FORCES BETWEEN SMALL PARTICLES WITH ARTIFICIALLY CREATED RANDOM LIGHT FIELDS
- 7:00 pm - 7:30 pm** **Closing Remarks**
- 8:00 pm - 9:00 pm** **Dinner**

Monday, April 13rd

Shuttle to El Calafate