

INTERNATIONAL CONFERENCE ON OPTICS, PHOTONICS & PHOTOSCIENCES PROGRAMME IN ADVANCE		
TUESDAY / MARTES 14		
08:00	ACCREDITATION / ACREDITACIÓN	
09:15	INAUGURATION / INAUGURACIÓN	
	PRINCIPAL HALL / SALA PRINCIPAL	
09:30	<b>PL-1 -SPECTRAL INTENSITY OPTICAL COHERENCE TOMOGRAPHY</b> Tomohiro Shirai <sup>a</sup> , Piotr Ryczkowski <sup>b</sup> , Goëry Genty <sup>b</sup> , and <b>Ari T. Friberg</b> * <sup>c</sup> <sup>a</sup> National Institute of Advanced Industrial Science and Technology (AIST), Japan <sup>b</sup> Tampere University of Technology, <sup>c</sup> Institute of Photonics, University of Eastern Finland ( *ICO Appointment)	SALA PRINCIPAL: SALA VEDADO SALA AUXILIAR: SALA SANCTI SPIRITUS
10:15	<b>PL-2- RECENT ADVANCES IN OPTICAL FIBRE BASED SPR SENSORS</b> Mohamad Daia Baiad <sup>2</sup> , Mathieu Gagne <sup>1</sup> and <b>Raman Kashyap</b> <sup>1,2</sup> The Fabulas Laboratory, Department of Engineering Physics <sup>1</sup> , Department of Electrical Engineering <sup>2</sup> , Polytechnique Montreal, Montreal, CANADA	
11:00	COFFEE BREAK	
11:30	<b>PL-3- TRANSFORMING WATER INTO FUEL USING SUNLIGHT</b> <b>Elena Vigil</b> Solar Energy Cathedra – Physics Faculty – Institute of Materials Science and Technology (IMRE), Universidad de La Habana, Cuba	
12:15	<b>PL-4- NEW DEVELOPMENTS AND NOVEL APPLICATIONS IN CONFINED OPTICAL GEOMETRIES: PLANAR WAVEGUIDES AND FIBERS</b> <b>G. Marowsky</b> , Laser-Laboratorium Göttingen, Germany	
1:00	<b>PL-5-HOLOGRAPHIC ART</b> <b>Reima Nurmikko</b> , Holographic Artist, Vainamoisenk, Finland	
2:00	LUNCH / ALMUERZO	
4:00	APERTURE OF INTERNATIONAL EXHIBIT & WELCOME COCKTAIL / APERTURA DE LA EXHIBICIÓN INTERNACIONAL Y COCKTEL DE BIENVENIDA	

WEDNESDAY / MIÉRCOLES 15		
	PRINCIPAL HALL / SALA PRINCIPAL	AUXILIAR HALL / SALA AUXILIAR
09:00	<b>IL-1-ELECTRON HOLOGRAPHIC INTERFEROMETRY: MEASURING INTO THE NANO WORLD</b> <b>Fernando Mendoza Santoyo<sup>1,2</sup></b> , Jesus Cantu Valle <sup>1</sup> , John Eder Sanchez <sup>1</sup> , Arturo Ponce Pedraza <sup>1</sup> and Jose Miguel Yacaman <sup>1</sup> <sup>1</sup> Centro de Investigaciones en Optica, A.C.Leon, Guanajuato, México, <sup>2</sup> Physics and Astronomy Department, University of Texas at San Antonio, Texas, USA	<b>IL-2- CORRELATION BETWEEN GROUP DELAY VELOCITY AND SPACE-AVERAGED ENERGY TRANSPORT VELOCITY IN FINITE PHOTONIC STRUCTURES</b> <b>M. de Dios –Leyva</b> , Department of Theoretical Physics, Faculty of Physics, University of Havana, Cuba
9:35	<b>IL-3-LASER-BASED TECHNIQUES AND 3D IMAGING SYSTEM FOR MATERIAL CHARACTERIZATION, CLEANING AND DOCUMENTATION OF CULTURAL HERITAGE OBJECTS</b> <b>Gabriel M. Bilmes<sup>*1,2</sup></b> , Mercedes Morita <sup>1</sup> <sup>1</sup> Laboratorio de Ablación, Limpieza y Restauración con Láser, Centro de Investigaciones Ópticas (CIOp) -CONICET La Plata-CIC. <sup>2</sup> Facultad de Ingeniería, Universidad Nacional de La Plata	<b>IL-4-THE RISING ROLE OF PHOTONICS IN TODAY'S DATA CENTRES</b> <b>Ivan Glesk<sup>*a</sup></b> , Alan Davidson <sup>b</sup> , Arjan Buisc <sup>a,b</sup> Department of Electronic and Electrical Engineering, Faculty of Engineering, University of Strathclyde, 204 George Street, Glasgow, G1 1XW, United Kingdom; <sup>c</sup> Department of Biomedical Engineering, Faculty of Engineering, University of Strathclyde, 106 Rottenrow, Glasgow, G1 1XW, United Kingdom.
10:10	<b>IL-5-MICROTOPOGRAPHIC CHARACTERIZATION OF ARQUEOLOGICAL CERAMICS</b> <b>Manuel F. M. Costa<sup>1</sup></b> , Wagner Magalhaes <sup>2</sup> , Márcia Angelina Alves <sup>2</sup> <sup>1</sup> Centro de Física, Universidade do Minho, Portugal <sup>2</sup> Museu de Arqueologia e Etnologia, Universidade de S. Paulo, Brazil	<b>IL 6-RANDOM LASERS: FROM BASICS TO APPLICATIONS</b> <b>Anderson S. L. Gomes</b> , Physics Department, UFPE, Brazil.
10:45	<b>IL-7-LASER TECHNIQUES IN ARTWORKS CONSERVATION IN ST.PETERSBURG, RUSSIA</b> <b>Vadim Parfenov</b> . St. Petersburg State Electrotechnical University, St.Petersburg, Russia,	<b>IL-8-INTEGRATED OPTICAL COMBS: TOWARDS SINGLE PHOTONS APPLICATIONS</b> Piotr Roztockia, Christian Reimer <sup>*a</sup> , Lucia Caspania, Matteo Clericia, <sup>b</sup> Marcello Ferreraa <sup>b</sup> , Michael Kues <sup>a</sup> , Marco Pecciantia <sup>c</sup> , Alessia Pasquazia <sup>c</sup> , Luca Razzaria, Brent E. Littled, Sai T. Chue, David J. Mossa,f, <b>Roberto Morandotti<sup>a</sup></b> <sup>a</sup> INRS-EMT, Québec, Canada; <sup>b</sup> School of Engineering and Physical Sciences, Heriot-Watt University, SUPA, Edinburgh, UK; <sup>c</sup> Department of Physics and Astronomy, University of Sussex, Falmer, Brighton, UK; <sup>d</sup> Xi'an Institute of Optics and Precision Mechanics of CAS, Xi'an, China; <sup>e</sup> City University of Hong Kong, Department of Physics and Material Science, Hong Kong, China; <sup>f</sup> School of Electrical and Computer Engineering, RMIT University, Melbourne, Australia;
11:20	<b>IL-9- DIGITAL IMAGE PROCESSING ALGORITHMS FOR SMART VIDEO SURVEILLANCE</b> <b>Edel Garcia-Reyes</b> Centro de Aplicaciones de Tecnologías de Avanzada (CENATAV), La Habana, Cuba.	<b>IL-10-DEVELOPING THE INTEGRATED OPTICAL TECHNOLOGY FOR THE QUANTUM INTERNET</b> <b>Peter G.R. Smith</b> , Southampton University, United Kingdom
11:55	COFFEE BREAK	

12:20	<p><b>OP-1-LIBS TECHNIQUE APPLIED TO THE QUALITATIVE DETERMINATION OF TOBACCO</b>  <b>F. C. Alvira</b><sup>*a</sup>, L. Ponce Cabrera<sup>c</sup>, T. Flores Reyes<sup>c</sup>, G. M. Bilmes<sup>ab</sup>,  <i>A) Centro de Investigaciones Ópticas, La Plata, Argentina. B) Facultad de Ingeniería Universidad Nacional de La Plata, Argentina. C) Centro de Investigación Aplicada y Tecnología Avanzada (IPN UNIDAD ALTAMIRA), México.</i></p>	<p><b>OP-2- A NOVEL TWO STATE OBSERVATION IN THE INSTABILITY INDUCED SUPERCONTINUUM GENERATION IN EXPONENTIAL SATURABLE NONLINEAR RESPONSE</b>  <b>K. Nithyanandan</b><sup>*</sup> and K. Porsezian  Pondicherry University, Puducherry, India.</p>
	*corresponding author	
12:40	<p><b>OP-3- COMPENSATION OF PHASE ABERRATION IN DIGITAL HOLOGRAPHY MICROSCOPY</b>  <b>Palacios G.</b>, Palacios F., Jorge Ricardo, Rafael F. Mut, Arias Y. <i>Department of Physics, Universidad de Oriente, Santiago de Cuba, Cuba,</i>  <b>Muramatsu M.</b> <i>Department of General Physics, Universidade de São Paulo, São Paulo, Brazil,</i>  <b>Monroy F. A.</b> <i>Department of Physics, Universidad Nacional de Colombia, Bogotá, Colombia.</i></p>	<p><b>OP-4- OPTO-ELECTROCHEMISTRY</b>  <b>K.Habib</b>  Materials Science and Photo-Electronics Lab., IRE Program, EBR Center, Kuwait</p>
1:00	<p><b>OP-5- SIGNAL AND IMAGE ALIGNMENT DURING THE APPLICATION OF FUNCTIONAL DATA ANALYSIS. PRACTICAL EXAMPLES OF CHEMOMETRICS AND BIOMETRICS.</b>  <b>Francisco José Silva Mata</b><sup>1*</sup>, Dania P.-Munoz<sup>1</sup>, Stefano Berretti, Víctor Mendiola-Lau, Isneri Talavera<sup>1</sup>, Noslen Hernández<sup>1</sup>, Yoanna Martínez-Díaz<sup>1</sup>, Angel G. Augier<sup>2</sup>.  <sup>1</sup> Centro de Aplicaciones de Tecnologías de Avanzada (CENATAV), La Habana, Cuba.  <sup>2</sup>Universidad de La Habana</p>	<p><b>OP-6-STUDY OF HIGH HARMONICS GENERATION (HHG) EMPLOYING FIELD ENHANCEMENT BY MEAN OF METALLIC NANOSTRUCTURES</b>  <b>Neyra E.</b><sup>a*</sup>, Videla F<sup>a</sup>., Torchia G<sup>a</sup>.  <sup>a</sup>Centro de Investigaciones Ópticas, CONICET-CIC. Argentina  *corresponding author</p>

01:20	<p><b>OP-7- SIMPLE GEOMETRIC GENERAL CODES ON COMPUTER-GENERATED HOLOGRAPHIC ENGRAVINGS</b>  Ángel G. Augier* <sup>1</sup>, Héctor Rabal <sup>2</sup>, <b>Raúl B. Sánchez</b> <sup>3</sup>  <sup>1,3</sup> Universidad de la Habana  <sup>2</sup> Centro de Investigaciones Ópticas (CONICET La Plata-CIC) and UID OPTIMO, Departamento de Ciencias Básicas. Facultad de Ingeniería. Universidad Nacional de la Plata. Argentina.  *Corresponding author: <a href="mailto:aaugier@fisica.uh.cu">aaugier@fisica.uh.cu</a></p>	<p><b>OP-8- SEMICLASSICAL MODELLING OF FINITE-PULSE EXCITATION EFFECTS ON THE PHOTOINDUCED MOLECULAR DYNAMICS VIA INITIAL CONDITION FILTERING: COMPARISON WITH QUANTUM WAVEPACKET PROPAGATION</b>  <b>A.Martínez-Mesa</b> * <sup>1</sup>, P. Saalfrank<sup>2</sup>  <sup>1</sup> Departamento de Física Teórica, Universidad de la Habana  <sup>2</sup> Institut für Chemie, Universität Potsdam,  *Corresponding author</p>
01:40	<p><b>OP-9- SPECKLE PATTERNS DURING THE SPREADING OF LUNG SURFACTANT (II)</b>  <b>Llovera-González, J.J.</b> *<sup>a</sup> Moreno-Yeras, A.<sup>a</sup>Cruz-Arencibia<sup>a</sup>, Serra-Toledo, R<sup>a</sup> J.D. Martínez-Muñoz, D.<sup>b</sup>Justo Ferreira, M.<sup>b</sup>ShinNishitani, W.<sup>b</sup> Barros de Almeida, A<sup>b</sup> Alencar, A.<sup>b</sup>Muramatsu, M<sup>c</sup>  <sup>a</sup><i>Dept. of Physics, Instituto Superior Politécnico "José Antonio Echeverría" Cujae, Calle 114 # 11901 Marianao, La Habana CP 19390, Cuba.</i>  <sup>b</sup><i>Laboratory of Microrheology and Molecular Physiology (lab M<sup>2</sup>), Dept. of Physics, Sao Paulo University, Rua do Matão Travessa R Nro. 187 Cidade Universitária, Sao Paulo CPE 05508-090</i>  <sup>c</sup><i>Laboratory of Optics, Dept. of Physics, Sao Paulo University, Rua do Matão Travessa R Nro. 187 Cidade Universitária, Sao Paulo CPE 05508-090</i>  *corresponding author:  <a href="mailto:llovera@electronica.cujae.edu.cu">llovera@electronica.cujae.edu.cu</a></p>	<p><b>OP-10- RELAXATION DYNAMICS IN QUANTUM DISSIPATIVE SYSTEMS: THE MICROSCOPIC EFFECT OF INTRAMOLECULAR VIBRATIONAL ENERGY REDISTRIBUTION</b>  <b>L. Uranga-Piña</b><sup>1</sup>, J. C. Tremblay<sup>2</sup>  <sup>1</sup> Departamento de Física Teórica, Universidad de la Habana  <sup>2</sup> Institut für Chemie und Biochemie, Freie Universität Berlin  *Corresponding author</p>
2:30	LUNCH / ALMUERZO	

**THURSDAY / JUEVES 16**

	<b>PRINCIPAL HALL / SALA PRINCIPAL</b>	<b>AUXILIAR HALL / SALA AUXILIAR</b>
09:00	<b>IL-11- PLASMONIC HIGH EFFICIENCY NONLINEAR SOLAR CELLS</b> <b>Jean-Michel Nunzi</b> , Department of Physics, Department of Chemistry Quenn's University, Canada	<b>IL -12-COHERENCE AND POLARIZATION STOKES PARAMETERS IN RANDOM ELECTROMAGNETIC OPTICS</b> Tero Setälä, Jani Tervo, Jari Turunen, and <b>Ari T. Friberg*</b> , Institute of Photonics, University of Eastern Finland, Joensuu, Finland, *corresponding author,
9:35	<b>IL-13-OPTICAL TRAPPING WITH STRUCTURED LIGHT</b> <b>Karen Volke-Sepúlveda</b> Instituto de Física, Universidad Nacional Autónoma de México, México D.F, México	<b>IL-14-HIGH ENERGY NON-COHERENT LIGHT PULSES: A REAL ALTERNATIVE TO LASER PROCESSING?</b> <b>Luis V. Ponce</b> <i>Centro de Investigación Aplicada y Tecnología Avanzada (IPN UNIDAD ALTAMIRA), México.</i>
10:10	<b>IL-15-PROBING OF POLARIZATION AND COHERENCE IN OPTICAL NEAR FIELDS</b> L.-P. Leppänen <sup>a</sup> , T. Hassinen <sup>b</sup> , S. Popov <sup>b</sup> , A. T. Friberg <sup>a</sup> , and <b>T. Setälä*</b> <sup>a</sup> <sup>a</sup> Institute of Photonics, University of Eastern Finland, Joensuu, Finland, <sup>b</sup> Optics and Photonics Department, Royal Institute of Technology (KTH), Stockholm, Sweden.	<b>IL-16-PHOTON ECHOES: FROM PHYSICS TO QUANTUM MEMORIES</b> <b>Jean-Pierre GALAUP</b> , Lab. Aimé Cotton, CNRS, Paris, France
10:45	<b>IL-17- WAVEFRONT METROLOGY FOR OPTICS AND LASER BEAM CHARACTERIZATION</b> <b>Klaus Mann</b> Laser-Laboratorium Göttingen, Göttingen, Germany	<b>IL-18- SPATIOTEMPORAL CHAOS AND ORDER IN FIBER LASERS</b> <b>Stefan Wabnitz</b> , UNIBS, Italy
11:20	<b>COFFEE BREAK</b>	

11.50	<p><b>IL-19- THE ROLE OF THE SOLAR RADIATION IN THE ENERGY OWN-SUPPLY OF A TERRITORY</b>  <b>Luis Berriz,</b>  CUBASOLAR, Cuba</p>	<p><b>IL-20-CALCULATED EXCITON BINDING AND TOPOLOGY OF OPTICALLY ACTIVE MOLECULES AND MOLECULAR CLUSTERS</b>  <b>Luis A. Montero-Cabrera</b><sup>*a</sup>, Ana Lilian Montero-Alejo<sup>a</sup>, José Manuel García de la Vega<sup>b</sup>, Eduardo Menéndez-Proupin<sup>b</sup>, Alán Aspuru-Guzik<sup>c</sup>, Edward Pyzer-Knapp<sup>c</sup>  <sup>a</sup>Laboratorio de Química Computacional y Teórica, Facultad de Química, Universidad de La Habana, Cuba; <sup>b</sup> Departamento de Química – Física Aplicada, Universidad Autónoma de Madrid, , España; <sup>c</sup> Department of Chemistry and Chemical Biology, Harvard University, Cambridge, USA</p>
12.25	<p><b>IL-21- A COMPARISON BETWEEN TWO STOPPING CRITERION FOR THE MEAN SHIFT ITERATIVE ALGORITHM. APPLICATION TO THE IMAGE SEGMENTATION</b>  <b>Roberto Rodriguez Morales</b>  Digital Signal Processing Group, Institute of Cybernetics, Mathematics &amp; Physics (ICIMAF), Havana, Cuba</p>	<p><b>IL-22- PULSED LASER TECHNIQUES TO PRODUCE NANOPARTICLES AND PHOTOACOUSTIC CHARACTERIZATION</b>  <b>Mayo Villagrán Muniz</b><sup>*1</sup>, Citlali Sánchez Aké<sup>1</sup>, Tupak García Fernández<sup>2</sup>, Crescencio García Segundo<sup>1</sup>, M. A. Valverde-Alva<sup>1</sup>, Francisco Tenopala<sup>1</sup>, Adriana Canales<sup>1</sup>, Jimena Martínez de León<sup>1</sup>, Beatriz de la Mora<sup>1</sup>, Francisco Álvarez del Castillo Manzanos<sup>1</sup>  <sup>1</sup>Centro de Ciencias Aplicadas y Desarrollo Tecnológico, Universidad Nacional Autónoma de México, México D.F, México, <sup>2</sup>Universidad Autónoma de la Ciudad de México (UACM), México D.F, México</p>
	<p><b>OP-11- LIGHT AND HABITABILITY IN AQUATIC ENVIRONMENTS</b>  <b>Rolando Cardenas</b><sup>*a</sup>, Dailé Avila-Alonso<sup>a</sup>, Jessica Alvarez-Salgueiro<sup>a</sup>, Roberto González-De Zayas<sup>b</sup>  <sup>a</sup>Planetary Science Laboratory, Department of Physics, Universidad Central “Marta Abreu” de Las Villas, Santa Clara, Cuba; <sup>b</sup>Centre for Research of Coastal Ecosystems, Cayo Coco, Cuba</p>	<p><b>OP-12-LASER ABLATION RATES CHARACTERIZATION OF GALVANIZED STEEL PLATES</b>  <b>Moreno J.C.</b><sup>a*</sup>, Orzi D. J. O.<sup>a</sup>, Alvira F. C.<sup>a</sup> and Bilmes G. M.<sup>a,b</sup>, <sup>a</sup>Laboratorio de Ablación, limpieza y Restauración con Láser, Centro de Investigaciones Ópticas (CONICET-La Plata-CIC). <sup>b</sup> Facultad de Ingeniería, Universidad Nacional de La Plata. Buenos Aires, Argentina</p>
1.35	<p><b>OP-13- METHOD DETERMINING THE SUPERFICIAL RUGGEDNESS BASED ON THE SPECKLE PATTERN DESCRIPTORS OF TEXTURE ANALYSIS</b>  <b>A. Pino</b><sup>*a</sup>, J. Pladellores<sup>b</sup>  <sup>a</sup> Universidad Tecnológica de Panamá,  <sup>b</sup> Universitat Politècnica de Catalunya</p>	<p><b>OP-14-USING TECHNOLOGY AS PEDAGOGICAL TOOLS</b>  <b>Anderson S. L. Gomes,</b>  Physics Department, UFPE, Brazil.</p>
2:30	<p style="text-align: center;"><b>LUNCH / ALMUERZO</b></p>	

	FRIDAY / VIERNES 17	
	PRINCIPAL HALL / SALA PRINCIPAL	Assigned time/Tiempo asignado
09:00	<b>PL-6- LASERS IN REGENERATIVE MEDICINE</b> <b>A. Heisterkamp<sup>1,2,3</sup></b> , T. Ehmke <sup>4</sup> , J. Krawinkel <sup>4</sup> , <b>M.L. Torres<sup>1,3</sup></b> , D. Heinemann <sup>2,3</sup> , <b>M. Schomaker<sup>2</sup></b> , H. Meyer <sup>2,3,5</sup> , T. Ripken <sup>2,3</sup> <sup>1</sup> Institute of Quantum Optics, Leibniz University Hannover, Germany <sup>2</sup> Laser Zentrum Hannover, Biomedical Optics Department, Hannover, Germany <sup>3</sup> Cluster of Excellence REBIRTH, D-30625 Hannover, Germany <sup>4</sup> Institute of Applied Optics, Friedrich-Schiller- University Jena, D-07743 Jena, Germany <sup>5</sup> Hannover Medical School, HTTG, Hannover, Germany	<b>PL</b> - Plenary Lecture (40 min+5 discussion ) <b>IL</b> - Invited Lecture (30 min+ 5 min) <b>OP</b> - Oral presentation (15 min+5 min )
9:45	<b>IL-23- SLOW LIGHT ENHANCED NONLINEAR OPTICS IN SILICON PHOTONIC CRYSTAL WAVEGUIDES</b> <b>David Moss</b> RMIT University, Melbourne, Australia	
10:20	COFFEE BREAK	
10:35	<b>POSTERS PRESENTATIONS / PRESENTACIÓN DE CARTELES</b>	
01:00	<b>CONCLUSION OF EVENT/ CONCLUSION DEL EVENTO</b>	
02:00	<b>LUNCH and FAREWELL PARTY/ ALMUERZO y FIESTA DE DESPEDIDA</b>	