

Wednesday 3rd

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| 08:45 | Introduction & Welcome ● | |
| 09:00 | All optical manipulation of metasurfaces for biophotonics applications Andrea Di Falco - chair: Nadège Courjal ● | |
| 09:45 | Liquid Crystal Elastomers: the new frontiers of light-driven actuators? Camillia Parmeggiani - chair: Kanty Rabenorosoa ● | |
| 10:30 | Coffee break ● | |
| Session | Light control for trapping and sensing chair: Thierry Grosjean co-chair: Yasuhiro Mizutani ● | Micro-Opto-Electro-Mechanical Systems (MOEMS) chair: Nicolas Passilly co-chair: Wei-Chih Wang ■ |
| | 10:50 | Control of Electric and Magnetic Nanolight Mathieu Mivelle (Invited) ● |
| 11:20 | Optomagnetic field in nonmagnetic plasmonic nanostructures Vage Karakhanyan, Clément Eustache, Yannick Lefier, Thierry Grosjean ● | MOEMS-based instruments for astronomy and space applications: MIRA and the BATMAN family Frédéric Zamkotsian (Invited) ■ |
| | 11:20 | Broadband MEMS Shutter Based Variable Optical Attenuator Anton Lagosh, Benedikt Guldimann, Gergely Huszka, Hamed Sattari, Berit Ahlers, Philippe Giaccari, Grégoire Kerr, Peyman Rahnama, Takeshi Nishizawa, Niels Quack ■ |
| 11:40 | Scanning 2D Surface Profilometry by using Spin-Hall Effect of Light Mizutani Yasuhiro, Li Zhehan, Yoshiyasu Tadokoro, Tsutomu Uenohara, Yasuhiro Takaya ● | Investigation of tunable fishnet metamaterials for optimal phase shift effet Wei-Chih Wang, Chieung Tsui, Chia-Tso Mo, Ting-Chun Kuo ■ |
| | 12:00 | Laser Actuated Microgripper for Micro-manipulation Applications Belal Ahmad, Hugo Chambon, Pierre Tissier, Michaël Gauthier, Guillaume J. Laurent, Aude Bolopion ● |
| 12:00 | Characterization of Mean Absorbance of an Anisotropic Turbid Media Yu-Lung Lo, Chieh-Chen Tsai, Ching-Min Chang ■ | |
| 12:20 | Light-induced thermocapillary manipulation Franco Piñan Basualdo, Pierre Lambert, Aude Bolopion, Michaël Gauthier ● | |
| 12:20 | A novel PZT MEMS fiber scanning microscope Wei-Chih Wang, Kuang-Chen Peng, Yi-Feng Hsu, Wen-Jong Wu, Sudarshan Kalel ■ | |

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| 12:40 | Networking and Lunch ● | |
| 14:00 | Advances in Volumetric 3D Printing Christophe Moser - chair: Antoine Barbot ● | |
| 14:45 | Metrology of terahertz fields in integrated photonics Ilena Cristina Benea-Chelmus - chair: Antoine Barbot ● | |
| 15:30 | Coffee break ● | |
| 15:50 | Flash presentation of the posters (see details on the last page) ● | |
| Session | Optical sensing and metrology chair: Rainer Tutsch co-chair: Guillaume Laurent ● | Fiber-based optical sensors chair: Nadège Courjal co-chair: Sébastien Claudot ■ |
| | 16:30 | Optical Microresonators for Gas Sensing in Dairy Farms Yves Alain Peter (invited) ● |
| 17:00 | Plasmonic Optical Fibers For Biomarkers Detection: An Overview Loyez Médéric (Invited) ■ | Interferometric measurement of the absolute topography of full spheres , a discussion of the main error sources Arnold Nicolaus, Eva Kuhn ● |
| | 17:00 | Implementation of a Optical Fiber Sensor to Measure Temperature in an Optical Trap Karen Reyes, Carmen E. Domínguez-Flores, Juan A. Rayas, David Monzón-Hernández, Raúl R. Cordero, Amalia Martínez-Garcí ■ |
| 17:20 | Introduction of a new tool for characterising optical 2D surface profilers - Rainer Tutsch, Ziyang Jiao, Gaoliang Dai, Benedikt Seeger, Thomas Weimann ● | Expanded Beam Connectors for Single Mode Optical Fiber Sensor Applications in Aerospace - Sébastien Claudot, Monique Thual, Xavier Insou, Lionel Quete ■ |
| 17:40 | Novel sensor principle for optical distance measurement based on the combination of laser triangulation and multi-wavelength interferometry Michael Krauhausen, Roland Priem ● | Multimode optical fiber sensor based on Fresnel reflection for refractive index measurement Antoine Brientin, Dominique Leduc, Virginie Gaillard, Marion Girard, Cyril Lupi ■ |
| 18:00 | Investigation of Whole-Field Curvature Measurement Accuracy of CGS Technique Wei-Chung Wang ● | Bloch surface waves on a fiber tip Clement Eustache, Aude L. Lereu, Roland Salut, Antonin Moreau, Miguel Angel Suarez, Julien Lumeau, Thierry Grosjean, Emiliano Descrovi ■ |

Thursday 4th

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| 08:30 | Photonic computing for massively parallel AI Laurent Daudet - chair: Laurent Larger ● | |
| 09:15 | Super resolution photo-acoustic imaging Emmanuel Bossy - chair: Laurent Larger ● | |
| 10:00 | Coffee break ● | |
| Session | Imaging & Reconstruction Techniques chair: Sounkalo Dembélé co-chair: Wei-Chih Wang ● | Free space optics for communication and monitoring in complex systems chair: Frédéric Lamarque co-chair: Vinicius N. H. Silva ■ |
| 10:20 | N-D Reconstruction for Cultural Heritage Accessibility: Multimodal and 3D Digitization of the Bayeux Tapestry Yvain Quéau (Invited), Matthieu Pizenberg, Abderrahim Elmoataz ● | Compact optical tracking modules for FSO mobile communications Bruno Fracasso (Invited), Jean-Baptiste Lamour, Muneeb Ullah Khan, Saly Malak, Hani Al Hajjar, Erwan Dupont, Christine Prella, Frederic Lamarque ■ |
| 10:50 | Multiscale nanoGPS tags for microscope calibration and relocalization Olivier Acher ● | Deep Learning Ghost Imaging Using Parallel Convolutional Neural Networks for Blur Correction by PSF Shoma Kataoka, Mizutani Yasuhiro, Uenohara Tsutomu, Takaya Yasuhiro ■ |
| 11:10 | Tomographic Diffraction Microscopy: 3D marker-less characterization of sample in both transmission and reflection regimes Nicolas Verrier, Marion Manzoni, Matthieu Debailleul, Xingyu Wu, Arnaud Spangenberg, Olivier Haerberlé (session invited) ● | Optical Triangulation for Free-Space Optics Beam Tracking using Artificial Neural Networks Felipe Hugo B. Bittar, Márcio Alexandre D. Garrido, Janaina R. do Nascimento, Alexandre B. dos Santos, Andrés Pablo L. Barbero, Vinicius N. H. Silva (session invited) ■ |
| 11:30 | Encoded pseudo-periodic patterns for robust visual pose determination at the microscale Antoine André, Patrick Sandoz, Maxime Jacquot, Guillaume Laurent ● | Optical wireless body area network for baby monitoring Stéphanie Sahuguède, Amina Boussebt, Amel Chehbani, Pierre Combeau, Anne Vergonjanne (session invited) ■ |
| 11:50 | Pollen 3D: An Application of 3D Reconstruction for the Scanning Electron Microscope Mayra Yucely BEB, Akkiz Bekel, Sounkalo Dembele, Patrick Rougeot, Isabelle Jouffroy-Bapicot (session invited) ● | Calibration of an optical power supply and remote sensing method for rotating machines temperature monitoring Muneeb Ullah Khan, Jeremy Terrien, racha Benarrait, Hani Al Hajjar, Frederic Lamarque (session invited) ■ |

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| 12:10 | Networking and Lunch ● | |
| 13:30 | Nonlinear and Electro-Optic Metal-Oxides for Active Photonic Devices Rachel Grange - chair: Niels Quack ● | |
| 14:15 | Lithium Niobate Nanophotonics: Giving a second youth to an old material Maria-Pilar Bernal - chair: Niels Quack ● | |
| 15:00 | Coffee Break ● | |
| 15:15 | Poster session ● | |
| Session | Emerging photonic concepts chair: Niels Quack co-chair: Cédric Clévy ● | Holography and Free Space Optics chair: Frédéric Zamkotsian co-chair: Yukitoshi Otani ■ |
| 15:45 | The Thrilling Opportunities fo Plasmonics in Optical Communications Claudia Hössbacher (Invited) ● | Spatial optical mode demultiplexing as a tool for optimal transverse distance estimation Pauline Boucher (Invited) ■ |
| 16:15 | Scalable Nanowatt Programmable Photonics Sangyoon Han (Invited), Kyoungsik Yu ● | In-system optimization of a computer-generated hologram for holographic femtosecond laser processing Honghao Zhang, Yoshio Hayasaki ■ |
| 16:45 | Dynamic Photo-Robotic Nanopositioning for Hybrid Photonic Circuits Based-on Self-Sensing tuning Fork Morris Mwangi, Mokrane Boudaoud, Jean Byiringiro, Philippe Lutz, Nadège Courjal, Cédric Clévy ● | Stokes imaging polarimeter for green technology Yukitoshi Otani, Nobuaki Endo, Shuhei Shibata, Nathan Hagen ■ |
| 17:05 | Improving Optothermal Activation Effect of Micro Bilayer Cantilever with FIB Milling Gap Yuning Lei, Cédric Clévy, J-Y Rauch, Philippe Lutz ● | Self-Autofocusing using Deep Learning for Digital Holography and Applied to Position Measurement Stéphane Cuenat, Antoine N. André, Louis Andreoli, Patrick Sandoz, Raphaël Couturier, Guillaume J. Laurent, Maxime Jacquot ■ |
| 17:25 | | All in one: Tunable prism and lens in a single element Pascal M Weber, Hitesh G B Gowda, Ulrike Wallrabe, Matthias C Wapler ■ |

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| 09:00 | Precision metrology using optical weak measurements Nirmalaya Gosh - chair: Indrani Bhattacharya ● | |
| 09:45 | Coffee break ● | |
| Session | Optical systems for biomedical applications chair: Franck Chollet co-chair: Cui Sun ● | Diffraction optics and advanced imaging chair: Indrani Bhattacharya co-chair: Guillaume Laurent ■ |
| 10:00 | MEMS tunable VCSEL for OCT imaging Hiroshi Toshiyoshi (Invited) ● | Polarization-masked Walsh filters for vector-wave imagery Indrani Bhattacharya (Invited) ■ |
| 10:30 | A proposed SLP system to collect additional point cloud data with dual optical channels Donald Ngo Fung Lai, Henry Gze Hin Chow, Ka Chun Lau, Lap Wing Cheung, Flora Fung Leung, Philip Wai Yan Chiu, Yeung Yam ● | Diffraction in Metasurfaces with Opposite Curvatures of Unit Cells Arpita Haldar, Vijaya Ramarao (session invited) ■ |
| 10:50 | In vivo vascular intima-media thickness and strain characterization based on intravascular optical coherence tomography images Cuiru Sun ● | Photothermal generation of microbubbles on graphene oxide for large scale assembly of nanoparticles and lensing applications Sudhir Cherukulappurath, Jostine Joby (session invited) ■ |
| 11:10 | Interactive Laser-actuated micro-robots for Experimental Biology Edison Gerena, Stéphane Régnier, Sinan Haliyo ● | Selective tuning of vortex beam lasing of bound states in the continuum in photonic crystal slab Sughra Mohamed, Jie Wang, Heikki Rekola, Benjamin Asamoah, Janne Heikkinen, Lei Wang, Tommi Hakala (session invited) ■ |
| 11:30 | Closing session, Award ceremony, Farewell ● | |
| 12:00 | Networking and Lunch ● | |
| 14:00 | Visits: FEMTO-ST, MIMENTO clean room, Photonic companies | |

15:50

Sylwester Bargiel, Fernando Eleazar Garcia Ramirez, Przemyslaw Struk, Jean-Loup Skora, Quentin Tanguy, Olivier Gaiffe, Philippe Lutz, Cote Jean-Marc, Huikai Xie, Christophe Gorecki
3-D micro-assembly approach to fabrication of a scanning MOEMS-based endoscopic probe for Optical Coherence Tomography imaging,

15:53

Olivier Acher
Characterization of microscopy stages using nanoGPS encoded plates: reproducibility, accuracy, and transient vibrations

15:56

Manuel I. Peña-Cruz, Leopoldo Martínez-Manuel, Camilo A. Arancibia-Bulnes, Heidi Isabel Villafán-Vidales, Alejandro Ayala-Cortés
Coupling a high flux solar simulator to a hydrothermal reactor: an optical analysis.

15:59

Wei-Chih Wang, Karthickraj Muthuramalingam
Electron generated NIR radiation in D shape Fiber

16:02

Wei-Chih Wang, Benjamin Estroff, Vinayak Ghorpade
Characterization of a Novel Fabry-Perot Fourier Transform Spectrometer

16:05

Wei-Chih Wang, Prabir Garu
Gradient Log-spiral antenna for Ultra-wideband Electromagnetic Wave Absorption: A Novel Approach

16:08

Martin Khouri, Florent Behague, Antoine Coste, Adrien Godet, Miguel Suarez, Paul Nobre, Gwenaël Gaborit, Lionel Duvillaret, Nadège Courjal
Lithium niobate polarization-state-modulator for electromagnetic sensing

16:11

Jean-Loup Skora, Olivier Gaiffe, Sylwester Bargiel, Jean-Marc Cote, Laurent Tarvernier, Michel De Labacherie, Nicolas Passilly
Micro-Optical Components Manufactured in Glass by Femtosecond Laser Irradiation Followed by Chemical Etching

16:14

Wei-Chih Wang, Karthickraj Muthuramalingam, Yen-Chieh Huang
RIB Waveguide based Free-electron Laser

16:17

Nahashon Osinde, Nicolas Andreff
Quantitative and experimental assessment of optical coherence tomography volumes obtained using non-raster trajectories