

# ICTON 2023 Programme

\* Click on the paper reference number, e.g., [Mo.B1.1](#) to access the specific paper.

Sunday, July 2

18:30-20:00 **Welcome Reception** at the conference venue, the Central Library of University Politehnica of Bucharest

Monday, July 3

8:00 **Registration**

9:30 **Opening Ceremony (9:30-10:00 Monday, July 3)**

**PLENARY** Chair: **George A. Stanciu** (10:00-11:00 Monday, July 3)

10:00 **Mo.A.1** Usage of photonics in remote medical diagnosis (**Invited**), *Zeev Zalevsky*

10:30 **Mo.A.2** Nanoplasmonics as enabler of room-temperature quantum nanophotonic networks (**Invited**), *Ortwin Hess*

**Coffee break** (11:00 – 11:20)

Track 1 – Room 2.1	Track 2 – Room 2.2	Track 3 – Room 2.3	Track 4 – Room 3.1	Track 5 – Room 3.2	Track 6 – Room 4.1
<p><b>ICTON I</b> Chair: <b>Francesco Prudenzano</b> (11:20-12:40 Monday, July 3)</p> <p>11:20 <b>Mo.B1.1</b> Intelligent network slicing in the multi-access edge computing for 6G networks (<b>Invited</b>) <i>X. Hesselbach</i></p> <p>11:40 <b>Mo.B1.2</b> Towards 6G AI-enabled service orchestration in the cloud continuum (<b>Invited</b>) <i>G. F. Pittala, D. Borsatti, G. Davoli, W. Cerroni, D. Tarchi, C. Raffaelli</i></p> <p>12:00 <b>Mo.B1.3</b> A scalable data collection system for continuous state of polarisation monitoring (<b>Invited</b>) <i>S. Bjørnstad, T. Dreibholz, J. Ali</i></p> <p>12:20 <b>Mo.B1.4</b> TDEC metric for 50G-PON using optical amplification (<b>Invited</b>) <i>M. Casasco, G. Caruso, I. Cano, A. Pagano, R. Mercinelli, M. Valvo, V. Ferrero, R. Gaudino</i></p>	<p><b>DCN I</b> Chair: <b>Carlos Natalino</b> (11:20-13:15 Monday, July 3)</p> <p>11:20 <b>Mo.B2.1</b> High-speed IM/DD system based on OTDM technique for next-generation datacenter network (<b>Invited</b>) <i>M. S. Kim, S. H. Bae, J. W. Park, K. Yu, Y. C. Chung</i></p> <p>11:40 <b>Mo.B2.2</b> Comparison of passive photonic reservoir computing architectures for signal equalization of future generation intra-DCN and mobile fronthaul systems (<b>Invited</b>) <i>S. Kühli, L. E. Kruse, S. Pachnicke</i></p> <p>12:00 <b>Mo.B2.3</b> Optical interconnection for datacenters: To switch or not to switch? (<b>Invited</b>) <i>J. Comellas, G. Junyent</i></p> <p>12:20 <b>Mo.B2.4</b> Optical datacenter network performance prediction (<b>Invited</b>) <i>F. Donnangelo, A. Castro</i></p> <p>12:40 <b>Mo.B2.5</b> Challenges and opportunities of a vastly distributed cloud computing infrastructure – In the Context of the Dong Shu Xi Suan (DSXS) project of China (<b>Invited</b>) <i>Ruiyun Liu, Shengnan Yue, Junyi Shao, Shuai Zhang, Jiawen Zhu, Baojun Chen, Weiqiang Sun, Weisheng Hu</i></p> <p>13:00 <b>Mo.B2.6</b> CC-IRAS: A centralized-control in-track access strategy for optical data center networks <i>P. Baziana</i></p>	<p><b>5GT</b> Chair: <b>Marian Marciniak</b> (11:20-13:10 Monday, July 3)</p> <p>11:20 <b>Mo.B3.1</b> (<b>Cancelled</b>)</p> <p>11:20 <b>Mo.B3.2</b> Point-to-multi-point coherent optics on data processing units (DPUs) for beyond-5G low-latency applications (<b>Invited</b>) <i>F. Cugini, M. Agus, M. Quagliotti, E. Riccardi, C. Castro, B. Spinnler, A. Napoli</i></p> <p>11:40 <b>Mo.B3.3</b> Comparison of statistical and machine learning-based approaches for telemetry data size reduction (<b>Invited</b>) <i>A. El Sayed, M. Ruiz, H. Harb, L. Velasco</i></p> <p>12:00 <b>Mo.B3.4</b> Evaluations of 10Gbps/25Gbps narrow band DBR EMLs for 5G smart applications (<b>Invited</b>) <i>Mengxiao Li, Kun Shang, Jianfei Gu, Yuchao Zhang, Haikun Zhang, Yaping Zhang</i></p> <p>12:20 <b>Mo.B3.5</b> Application of linear regression in latency estimation in packet-switched 5G xHaul networks (<b>Invited</b>) <i>M. Klinkowski, J. Perello, D. Careglio</i></p> <p>12:40 <b>Mo.B3.6</b> Performance analysis of network slicing in packet-switched 5G xHaul access network <i>D. Mroziński, M. Klinkowski, K. Walkowiak</i></p> <p>12:55 <b>Mo.B3.7</b> Combining random forest and linear regression to improve network traffic prediction <i>B. Ulanowicz, D. Dopart, A. Knapiška, P. Lechowicz, K. Walkowiak</i></p>	<p><b>Novel Glasses</b> Chair: <b>Jan Mrázek</b> (11:20-11:55 Monday, July 3)</p> <p>Mo.B4.1 (<b>Cancelled</b>)</p> <p>11:20 <b>Mo.B4.2</b> Ga-Sb-Te thin films deposited by magnetron co-sputtering (<b>Invited</b>) <i>M. Kotrla, J. Gutwirth, P. Janiček, J. Pírkryl, T. Halenkovič, F. Cheviré, V. Nazabal, P. Němec</i></p> <p>Mo.B4.3 (<b>Cancelled</b>)</p> <p>11:40 <b>Mo.B4.4</b> Fabrication of tapered devices with fluoride and chalcogenide optical fibers for Mid-IR applications <i>F. Anelli, A. Annunziato, A. M. Loconsole, Vi. Portosi, V. V. Francione, M. C. Falconi, P. Le Pays Du Teilleul, S. Cozic, S. Poulain, F. Prudenzano</i></p>	<p><b>CTS</b> Chair: <b>Kira Kastell</b> (11:20-13:00 Monday, July 3)</p> <p>11:20 <b>Mo.B5.1</b> Path planning algorithm for a hybrid wireless sensor network and UAV as mobile sink considering energy constraints (<b>Invited</b>) <i>L. C. Moro, A. S. da Silva, O. A. R. da Cruz, J. A. da Silva, J. P. J. da Costa, C. E. Pereira, A. Vinel, E. P. de Freitas, K. Kastell</i></p> <p>11:40 <b>Mo.B5.2</b> Radio jamming in vehicle-to-everything communication systems: Threats and countermeasures (<b>Invited</b>) <i>A. S. da Silva, J. P. J. da Costa, G. A. Santos, Z. Miri, M. I. B. M. Fauzi, A. Vinel, E. P. de Freitas, K. Kastell</i></p> <p>12:00 <b>Mo.B5.3</b> Awareness information dissemination using aggregation into collective perception messages for connected vehicles (<b>Invited</b>) <i>J. Manias I Parella, J. Casademont, F. Vázquez-Gallego, E. Lopez-Aguilera</i></p> <p>12:20 <b>Mo.B5.4</b> An automotive communication bus using OFDMA (<b>Invited</b>) <i>M. Koepp, K. Habel, V. Jungnickel</i></p> <p>12:40 <b>Mo.B5.5</b> A digital twin for enhanced cybersecurity in connected vehicles (<b>Invited</b>) <i>C. Grasselli, A. Melis, R. Girau, F. Callegati</i></p>	<p><b>PICAW I</b> Chair: <b>Slawomir Sujecki</b> (11:20-13:20 Monday, July 3)</p> <p>11:20 <b>Mo.B6.1</b> Flexible photonic integrated circuits: A new paradigm to process data on-board satellites (<b>Invited</b>) <i>M. N. Armenise, A. di Toma, G. Brunetti, N. Saha, C. Ciminelli</i></p> <p>11:40 <b>Mo.B6.2</b> Standardization and automation of test processes in the production flow of integrated photonics (<b>Invited</b>) <i>S. Latkowski, D. Pustakhod, R. Jansen, X. Leijtens, K. Williams</i></p> <p>12:00 <b>Mo.B6.3</b> Calibration of a photonic neural network considering fabrication tolerances (<b>Invited</b>) <i>O. Düzgöl, M. Kirtas, N. Passalis, A. Richter</i></p> <p>12:20 <b>Mo.B6.4</b> Design and fabrication challenges of integrated optical circuits for quantum computing applications (<b>Invited</b>) <i>S. I. Tsintzos, K. Tsimvrakidis, A. Sinani, A. Bogris, J. C. Gates, P. G.R. Smith, A. W. Elshaari, V. Zwiller, C. Riziotis</i></p> <p>12:40 <b>Mo.B6.5</b> Direct laser writing of photonic waveguide components in polymer (<b>Invited</b>) <i>T. Baghdasaryan, K. Vanmol, F. Berghmans, H. Thienpont, J. Van Erps</i></p> <p>13:00 <b>Mo.B6.6</b> High-baudrate silicon photonics ring resonator and Mach-Zehnder modulators for short-reach applications (<b>Invited</b>) <i>O. Ozolins, A. Ostrovskis, M. Koenigsmann, T. Salgals, B. Krüger, F. Pittalà, R. P. Scott, H. Haisch, H. Louchet, A. Marinins, S. Spolitis, J. Porins, Lu Zhang, R. Schatz, Xianbin Yu, V. Bobrovs, M. Gruen, Xiaodan Pang</i></p>
<p><b>Lunch break</b> (12:40-14:10)</p>	<p><b>Lunch break</b> (13:15-14:40)</p>	<p><b>Lunch break</b> (13:10-14:30)</p>	<p><b>Lunch break</b> (11:55-14:10)</p>	<p><b>Lunch break</b> (13:00-14:30)</p>	<p><b>Lunch break</b> (13:20-14:50)</p>
<p><b>ICTON II</b> Chair: <b>Xavier Hesselbach</b> (14:10-16:00 Monday, July 3)</p> <p>14:10 <b>Mo.C1.1</b> High data-rate and wideband transmission in single and multi-core fibers (<b>Invited</b>) <i>B. Puttnam, R. Luis, G. Rademacher, Y. Awaji, H. Furukawa</i></p> <p>14:30 <b>Mo.C1.2</b> The nonlinear Fourier transform and its extension to the strong coupling multi-mode case (<b>Invited</b>) <i>B. Leible, N. Hanik</i></p> <p>14:50 <b>Mo.C1.3</b> Physics-informed neural network for fibre channel modelling in optical communication systems (<b>Invited</b>) <i>J. Uduagbomen, S. Lakshminarayana, Zheng Liu, M. S. Leeson, Tianhua Xu</i></p>	<p><b>SDM-WDM</b> Chair: <b>Ioannis Roudas</b> (14:40-16:40 Monday, July 3)</p> <p>14:40 <b>Mo.C2.1</b> High-capacity and ultra-long-haul transmission over transoceanic distances using coupled and uncoupled 4-core fibers with standard cladding diameter (<b>Invited</b>) <i>M. Suzuki, D. Soma, S. Beppu, Y. Wakayama, N. Yoshikane, T. Tsurtani</i></p> <p>15:00 <b>Mo.C2.2</b> Effect of core-dependent loss on the intercore crosstalk in multicore fiber systems with concatenated random loss fiber segments (<b>Invited</b>) <i>J. L. Rebola, A. V. T. Cartaxo</i></p> <p>15:20 <b>Mo.C2.3</b> On the use of feedforward neural networks to Improve the ICXT tolerance in self-coherent MCF systems (<b>Invited</b>) <i>T. M. F. Alves, D. Piedade, T. Brandão, J. L. Rebola, A. V. T. Cartaxo</i></p>	<p><b>B5GneO I</b> Chair: <b>Luis Velasco</b> (14:30-15:50 Monday, July 3)</p> <p>14:30 <b>Mo.C3.1</b> PILOT: A methodology for modeling the performance of packet connections (<b>Invited</b>) <i>J. Comellas, M. Ruiz, L. Velasco</i></p> <p>14:50 <b>Mo.C3.2</b> A distributed telemetry architecture for optical networks (<b>Invited</b>) <i>P. González, L. Velasco, M. Ruiz</i></p> <p>15:10 <b>Mo.C3.3</b> Reinforcement learning for autonomous traffic flow capacity management (<b>Invited</b>) <i>S. Barzegar, M. Ruiz, L. Velasco</i></p>	<p><b>SWP I</b> Chair: <b>Mikhail Vasilevskiy</b> (14:10-15:50 Monday, July 3)</p> <p>14:10 <b>Mo.C4.1</b> Latest advances in quartz enhanced photoacoustics spectroscopy for environmental and industrial applications (<b>Invited</b>) <i>A. Zifarelli, G. Menduni, M. Giglio, A. Sampaolo, P. Patimisco, Hongpeng Wu, Lei Dong, V. Spagnolo</i></p> <p>14:30 <b>Mo.C4.2</b> Partial least squares and partial least squares-discriminant analysis to detect and quantify adulterations in olive oil using optical methods of analysis. A comparative study between NIR and UV-Vis spectroscopy (<b>Invited</b>) <i>D. Castro, M. C. Ortiz, S. Sanllorente, I. Garcia, I. Ayesta, M. Azkune, J. Zubia</i></p> <p>14:50 <b>Mo.C4.3</b> Photonic multilayers for broadband and large area superchiral surface waves (<b>Invited</b>) <i>G. Pellegrini, E. Mogni, J. Jil-Rostra, F. Yubero, G. Simone, S. Fossati, J. Dostálek, R. Martinez Vázquez, R. Osellame, M. Celebrano, M. Finazzi, P. Biagioni</i></p>	<p><b>MWP</b> Chair: <b>Robert Minasian &amp; Hovik Baghdasaryan</b> (14:30-16:05 Monday, July 3)</p> <p>14:30 <b>Mo.C5.1</b> Integrated microwave photonic signal processing and sensing (<b>Invited</b>) <i>R. Minasian, Xiaoke Yi</i></p> <p>14:50 <b>Mo.C5.2</b> Silicon photonics for millimeter-wave band signal generation (<b>Invited</b>) <i>C. Porzi, A. Malacarne, F. Scotti, M. Scaffardi, P. Ghelfi, A. Bogoni</i></p> <p>15:10 <b>Mo.C5.3</b> Integrated microwave photonics: A chip platform by hybrid integration of InP and SiN TriPleX (<b>Invited</b>) <i>C. Roeloffzen, P. Maat, I. Visscher, M. Hoekman, L. Wevers, E. Klein, P. van Dijk, R. B. Timens, R. Grootjans, F. Şahin, R. Heuvink, R. Dekker</i></p>	<p><b>AFLaser I</b> Chair: <b>Filip Todorov</b> (14:50-16:25 Monday, July 3)</p> <p>14:50 <b>Mo.C6.1</b> Pulsed fluoride glass fiber lasers operating near 3 µm (<b>Invited</b>) <i>S. Sujecki, Ł. Sójka, Ł. Pajewski, S. Phang, M. Farries, D. Furniss, E. Barney, T. Benson, A. Seddon, S. Lamrini</i></p> <p>15:10 <b>Mo.C6.2</b> Transparent ceramic fibers for short- and mid- infrared lasers (<b>Invited</b>) <i>J. Mrázek, O. Podrazký, J. Aubrecht, I. Bartoň, Y. Baravets, J. Proboštová</i></p> <p>15:30 <b>Mo.C6.3</b> Thulium cross sections temperature dependence and its effect on fiber laser operation (<b>Invited</b>) <i>P. Peterka, B. Jiříčková, O. Schreiber, M. Grábner</i></p>

15:10 <b>Mo.C1.4</b> Characterization of the modal distribution from linear and nonlinear mode coupling in multimode fibers <b>(Invited)</b> <i>M. Zitelli, M. Ferraro, F. Mangini, S. Wabnitz</i>	15:40 <b>Mo.C2.4</b> Dispersion-diversity signal processing in Space-division multiplexing fibers <b>(Invited)</b> <i>S. García, E. Nazemosadat, M. Ureña, I. Gasulla</i>	15:30 <b>Mo.C3.4</b> Disaggregated delay modeling in multidomain networks <b>(Invited)</b> <i>D. Careglio, M. Ruiz, L. Velasco</i>	15:10 <b>Mo.C4.4</b> From smart materials for space industry to soil temperature gauges for climate change monitoring – A review of new applications of distributed optical fiber sensors <b>(Invited)</b> <i>L. Szostkiewicz</i>	15:30 <b>Mo.C4.5</b> Real-time monitoring systems using fiber optic sensors <b>(Invited)</b> <i>S. Sales, D. Barrera, J. Madrigal, D. Maldonado-Hurtado, V. Hernández-Ambato</i>	15:30 <b>Mo.C5.4</b> Microwave-based remote bio-sensing behind walls <b>(Invited)</b> <i>O. Meshulam, N. Ozana, D. Scheffer, S. Zach, Z. Zalevsky</i>	15:50 <b>Mo.C6.4</b> Fabrication of a Cr <sup>4+</sup> :YAG crystal fiber and its use in a mode-locked all-fiber laser source <b>(Invited)</b> <i>Kai-Chieh Chang, Chun-Nien Liu, Sheng-Lung Huang, Wood-Hi</i>
15:30 <b>Mo.C1.5</b> Algorithms for the nonlinear Fourier transform in the strong coupling multi-mode case <i>B. Leible, N. Hanik</i>	16:00 <b>Mo.C2.5</b> Advanced resource allocation strategies for MCF-based SDM-EONs: Crosstalk aware and machine learning assisted algorithms <b>(Invited)</b> <i>S. Petale, S. Subramaniam</i>				15:50 <b>Mo.C5.5</b> Experimental characterization of a MMW signal generation approach based on optical phase modulation and optical filtering for data transmission over a directly modulated laser <i>M. Botella-Campos, J. Mora, B. Ortega</i>	16:10 <b>Mo.C6.5</b> Design of a Pr <sup>3+</sup> :InF <sub>3</sub> fiber laser pumped in near-IR and emitting at 4 micron wavelength <i>A. M. Loconsole, A. Annunziato, F. Anelli, V. V. Francione, V. Portosi, M. C. Falconi, F. Prudeniano</i>
15:45 <b>Mo.C1.6</b> Observing disaggregated cross-channel NLI generation in dispersion-managed links <i>E. London, E. Virgillito, A. D'Amico, V. Curri</i>	16:20 <b>Mo.C2.6</b> Self-coherent detection in multicore fiber systems impaired by intercore crosstalk <b>(Invited)</b> <i>N. J. Muga, T. M. F. Alves, R. K. Patel, I. A. Alimi, A. N. Pinto, A. V. T. Cartaxo</i>					

<b>Coffee break</b> (16:00-16:30)	<b>Coffee break</b> (16:40-17:10)	<b>Coffee break</b> (15:50-16:20)	<b>Coffee break</b> (15:50-16:20)	<b>Coffee break</b> (16:05-16:30)	<b>Coffee break</b> (16:25-16:50)
<b>ICTON III</b> <i>Chair: João L. Rebola (16:30-18:20 Monday, July 3)</i>	<b>QPhot I</b> <i>Chair: Brana Jelenković (17:10-18:10 Monday, July 3)</i>	<b>MALOC I</b> <i>Chair: Georgios Ellinas (16:20-18:10 Monday, July 3)</i>	<b>SWP II</b> <i>Chair: Lukasz Szostkiewicz (16:20-18:10 Monday, July 3)</i>	<b>OMT I</b> <i>Chair: Zeev Zalevsky (16:30-18:10 Monday, July 3)</i>	<b>AFLaser II</b> <i>Chair: Slawomir Sujecki (16:50-17:50 Monday, July 3)</i>
16:30 <b>Mo.D1.1</b> High-speed random number generation and key distribution in fiber networks using amplified spontaneous emission <b>(Invited)</b> <i>Xinran Huang, Zhi Chai, Mingye Li, Liuming Zhang, Zanwei Shen, Weiqiang Sun, Xuelin Yang</i>	17:10 <b>Mo.D2.1</b> Colour centres in aluminium nitride are bright, room-temperature quantum light sources <b>(Invited)</b> <i>J. K. Cannon, S. G. Bishop, Yanzhao Guo, H. B. Yağcı, R. N. Clark, J. P. Hadden, A. J. Bennett</i>	16:20 <b>Mo.D3.1</b> Intent-based networking for zero-touch optical networking <b>(Invited)</b> <i>S. Barzegar, M. Ruiz, L. Velasco</i>	16:20 <b>Mo.D4.1</b> Stabilization of laser emission by non-Hermitian potentials <b>(Invited)</b> <i>R. Herrero, S. B. Ivars, M. Botey, K. Staliunas</i>	16:30 <b>Mo.D5.1</b> Super-resolved imaging behind scattering medium <b>(Invited)</b> <i>E. Israeli, A. Sanjeev, R. Salahudeen Rafeeka, G. Chen, Z. Zalevsky</i>	16:50 <b>Mo.D6.1</b> Recent advances in mid-infrared fluorindate fiber lasers <b>(Invited)</b> <i>M. C. Falconi</i>
16:50 <b>Mo.D1.2</b> Time-expanded in distributed optical fiber sensing <b>(Invited)</b> <i>M. Soriano-Amat, H. F. Martins, V. Durán, S. Martin-Lopez, M. Gonzalez-Herraez, M. R. Fernández-Ruiz</i>	17:30 <b>Mo.D2.2</b> Silicon nitride integrated quantum photonics <b>(Invited)</b> <i>K. Mnaymneh, E. Yeungb, D. B. Northeast, Jeongwan Jin, P. Laferrière, S. Haffouz, P. J. Poole, Dan Dalacu, R. L. Williams</i>	16:40 <b>Mo.D3.2</b> Dynamic drift-adaptive ensemble-based quality of transmission classification framework in OTN <b>(Invited)</b> <i>H. Q. Tran, J. Errea, V.-Q. Pham, D. Verchere, A. Ksentini, D. Zeghlache</i>	16:40 <b>Mo.D4.2</b> Lasing threshold in nanolasers with extreme dielectric confinement <b>(Invited)</b> <i>M. Saldutti, Yi Yu, J. Mark</i>	16:50 <b>Mo.D5.2</b> Super-resolved non-linear optical microscopy: Architectures, advantages and perspectives <b>(Invited)</b> <i>S. G. Stanciu, R. Hristu, G. A. Stanciu, D. E. Tranca, L. Eftimie, A. Dumitru, M. Costache, H. A. Stenmark, J. M. Bueno, P. Bianchini, E. M. M. Manders</i>	17:10 <b>Mo.D6.2</b> Rare-earth-doped silica optical fibers and all-fiber lasers operating in the 2- $\mu$ m spectral range <b>(Invited)</b> <i>F. Todorov, M. Kamrádek, I. Kašik</i>
17:10 <b>Mo.D1.3</b> Detection, localization and emulation of environmental activities using SOP monitoring of IM-DD optical data channels <b>(Invited)</b> <i>E. Virgillito, S. Straullu, F. Aquilino, R. Bratovich, H. Awad, R. Proietti, R. Pastorelli, V. Curri</i>	17:50 <b>Mo.D2.3</b> Bright multimode entanglement out of a SiN microring <b>(Invited)</b> <i>A. Bensemhoun, V. D'Auria, M. Melalkia, G. Esposito, Y. Désières, S. Guerber, G. Wilmart, K. Roux, S. Olivier, A. Zavatta, C. Gonzalez-Arciniegas, O. Pfister, A. Martin, J. Etesse, L. Labonté, G. Patera, S. Tanzilli</i>	17:00 <b>Mo.D3.3</b> Machine-learning-as-a-service for optical networks: Use cases and benefits <b>(Invited)</b> <i>C. Natalino, N. Mohammediha, A. Panahi, P. Monti</i>	17:00 <b>Mo.D4.3</b> Optical properties of some selected organometallic compounds <b>(Invited)</b> <i>A. Aamoum, S. Taboukhat, Y. El Kouari, A. Zawadzka, A. Andrushchak, B. Sahrroui</i>	17:10 <b>Mo.D5.3</b> Surface roughness and optical characterization of nanoporous silver films synthesized by one-step dealloying <b>(Invited)</b> <i>S. R. Anton, Engang Fu, D. E. Tranca, S. G. Stanciu, A. Toma, C. V. Sammut, Zhaoyi Hu, G. A. Stanciu</i>	17:30 <b>Mo.D6.3</b> Harnessing vector multi-pulsing soliton dynamics <b>(Invited)</b> <i>S. V. Sergeev, H. Khashi, C. Mou</i>
17:30 <b>Mo.D1.4</b> Optical combining in medium infrared wavelength range and its applications <b>(Invited)</b> <i>A. Annunziato, F. Anelli, A. M. Loconsole, M. C. Falconi, V. Portosi, V. V. Francione, F. Prudeniano</i>	17:50 <b>Mo.D2.4</b> Pressure-induced long-period gratings in multi-core fibers <i>L. M. Sousa, R. Oliveira, R. N. Nogueira, A. M. Rocha</i>	17:20 <b>Mo.D3.4</b> Using SHAP values to validate model's uncertain decision for ML-based lightpath quality-of-transmission estimation <b>(Invited)</b> <i>H. Houssiany, O. Ayoub, C. Rottondi, A. Bianco</i>	17:20 <b>Mo.D4.4</b> Self-cleaning in non-Hermitian linear multimode fibers <b>(Invited)</b> <i>M. N. Akhter, S. B. Ivars, R. Herrero, K. Staliunas, M. Botey</i>	17:30 <b>Mo.D5.4</b> Collagen organization in second harmonic generation images for the assessment of thyroid nodule capsular invasion <b>(Invited)</b> <i>R. Hristu, S. G. Stanciu, D. E. Tranca, L. G. Eftimie, A. Enache, G. A. Stanciu</i>	
18:05 <b>Mo.D1.6</b> Maximizing performance of SiN Bragg filters for TE/TM polarization through non-coherent cascading for ultra-high rejection <i>D. E. Medina-Quiroz, Q. Wilmart, O. Ségolène, S. Guerber, S. Tanzilli, L. Vivien, L. Labonté, É. Cassan, C. Alonso-Ramos</i>		17:40 <b>Mo.D3.5</b> Iterative transfer learning approach for QoT prediction of lightpath in optical networks <i>H. Tariq, F. Usmani, I. Khan, M. U. Masood, A. Ahmad, V. Curri</i>	17:40 <b>Mo.D4.5</b> Cascade PI constant current regulator for high power infrared laser diode bars <i>M.-A. Covaci, R. V. Galatus, L. A. Szolga</i>	17:50 <b>Mo.D5.5</b> Investigations on liquid crystal embedded CdTe quantum dots with spectrally resolved confocal laser scanning microscopy <b>(Invited)</b> <i>C. Cirtoaje, S. R. Anton, V. Ghidic, S. G. Stanciu</i>	
		17:55 <b>Mo.D3.6</b> Knowledge distillation-based compression model for QoT estimation of an unestablished lightpaths <i>F. Usmani, I. Khan, M. U. Masood, A. Ahmad, V. Curri</i>	17:55 <b>Mo.D4.6</b> Intensity noise of gain-switched quantum dot laser based on multi-population rate equations <i>N. Dogru, H. S. Duranoglu Tunc, E. Cengiz</i>		

20:00- 23:00 **Dinner at Hanu' lui Manuc** (Manuc's Inn) – Old Center of Bucharest

<b>Tuesday, July 4</b>					
<b>Track 1 – Room 2.1</b>	<b>Track 2 – Room 2.2</b>	<b>Track 3 – Room 2.3</b>	<b>Track 4 – Room 3.1</b>	<b>Track 5 – Room 3.2</b>	<b>Track 6 – Room 4.1</b>
<b>ICTON IV</b> <i>Chair: Mario Zitelli (8:30-10:05 Tuesday, July 4)</i>	<b>QPhot II</b> <i>Chair: Ortwin Hess (8:30-10:05 Tuesday, July 4)</i>	<b>Flex-ON</b> <i>Chair: Miroslaw Klinkowski (8:30-9:45 Tuesday, July 4)</i>	<b>SWP III</b> <i>Chair: Alex Quandt (8:30-10:10 Tuesday, July 4)</i>	<b>OMT II</b> <i>Chair: Georges Boudebs (8:30-9:50 Tuesday, July 4)</i>	<b>PNPA I</b> <i>Chair: Luigi Sirlito (8:30-9:50 Tuesday, July 4)</i>
8:30 <b>Tu.A1.1</b> Superoscillating signal transmission over dispersive media <b>(Invited)</b> <i>Y. Ben-Ezra, B. I. Lembrikov</i>	Tu.A2.1 <b>(Cancelled)</b>	8:30 <b>Tu.A3.1</b> Practical spectral efficiency estimation for optical networking <b>(Invited)</b> <i>J. M. Gené, J. Perelló, J. Cho, S. Spadaro</i>	8:30 <b>Tu.A4.1</b> Large nonlinear efficiency enhancement in the visible and UV range from plasmonic gold nanogratings <b>(Invited)</b> <i>C. Cojocaru, S. Mukhopadhyay, L. Rodríguez-Suné, M. A. Vincenti, R. Vilaseca, M. Scalora, J. Trull</i>	8:30 <b>Tu.A5.1</b> Overcoming silicon limitations short review: How geometrical innovation can revolutionize nanophotonics and nanoelectronics <b>(Invited)</b> <i>A. Karsenty</i>	Tu.A6.1 <b>(Cancelled)</b>
8:50 <b>Tu.A1.2</b> Digital signal processing for optical phase conjugation assisted coherent systems <b>(Invited)</b> <i>L. H. Nguyen, T. T. Nguyen, A. Ellis, S. Sygletos, S. Boscolo</i>	8:30 <b>Tu.A2.2</b> Quantum-optical principle for photons/bosons, equivalent to Pauli's exclusion principle <b>(Invited)</b> <i>M. Pollnau</i>	8:50 <b>Tu.A3.2</b> Evaluating the Impact of the guard band width on the benefits of probabilistic constellation shaping in future flex-grid over multicore fibre optical backbone networks <b>(Invited)</b> <i>J. Perelló, J. M. Gené, J. Cho, S. Spadaro</i>	8:50 <b>Tu.A4.2</b> Nanostructured fiber optics for high sensitivity, minimally invasive, spatially-resolved, plasmonic diagnosis and therapeutics <b>(Invited)</b> <i>L. Collard, F. Pisano, Di Zheng, A. Balena, M. F. Kashif, M. Pisanello, B. Spagnolo, R. Mach-Battle, A. D'Orazio, F. De Angelis, M. Valiente, L. M. de la Prida, C. Ciraci, M. Grande, F. Pisanello, M. De Vittorio</i>	8:50 <b>Tu.A5.2</b> Photothermal efficiency of gold nanoparticles using cw Z-scan technique in the visible range <b>(Invited)</b> <i>G. Boudebs, J.-B. Zinoune, C. Cassagne, M. Loumagne, M. Chis, M. H. V. Werts</i>	8:30 <b>Tu.A6.2</b> A review of dissipative soliton resonance in fiber lasers <b>(Invited)</b> <i>F. Sanchez, A. Komarov, G. Semaan</i>
9:10 <b>Tu.A1.3</b> Entanglement assisted MIMO quantum radars <b>(Invited)</b> <i>I. B. Djordjevic</i>	8:50 <b>Tu.A2.3</b> Spatial Fano resonance and its implication for a glass microsphere <b>(Invited)</b> <i>V. Klimov, R. Heydariyan, C. Simovski</i>	9:10 <b>Tu.A3.3</b> Performance of defragmentation approach based on route partitioning in 1+1 protected elastic optical networks <b>(Invited)</b> <i>E. Oki, B. C. Chatterjee</i>	9:10 <b>Tu.A4.3</b> Electrical manipulation of plasmonic relaxation and the application of voltage-modulated plasmon resonance to biosensing <b>(Invited)</b> <i>K. Barman, Syu-Cing Ma, R. Gupta, Liang-Yun Lee, Jian-Jang Huang</i>	9:10 <b>Tu.A5.3</b> Mechanical and optical investigations of Cr thin films deposited on Si substrate <b>(Invited)</b> <i>D. E. Tranca, A. Sobetkii, R. Hristu, S. R. Anton, S. G. Stanciu, E. Fiorentis, E. Vasile, C. K. Banica, G. A. Stanciu</i>	8:50 <b>Tu.A6.3</b> Linear and nonlinear optical properties of Zn <sub>0</sub> -ZnWO <sub>4</sub> eutectic composites <b>(Invited)</b> <i>C. Sibilia, G. Leahu, R. Li Voti, E. Petronjievic, M. C. Larciprete, M. Centini, A. Belardini, D. Pawlak</i>
9:30 <b>Tu.A1.4</b> Experimental investigation of phase-space portraits of ideal four-wave mixing <b>(Invited)</b> <i>A. Sheveleva, A. Ermolae, P. Colman, J. M. Dudley, C. Finot</i>	9:10 <b>Tu.A2.4</b> Entangled pairs of photons for squeezed light – Generation and application <b>(Invited)</b> <i>M. Čurčić, D. Arsenović, B. Jelenković</i>	9:30 <b>Tu.A3.4</b> PDavXT: Partition-based crosstalk-avoided defragmentation scheme for spectrally-spatially elastic optical networks <i>R. Khantwal, V. Kumar, E. Oki, B. C. Chatterjee</i>	9:30 <b>Tu.A4.4</b> Analysis of plasmonic interactions in nonlocal and nanosnowman structures <b>(Invited)</b> <i>P. Kwiecien, M. Burda, P. Klajs, L. Marešová, I. Richter</i>	9:30 <b>Tu.A5.4</b> Multi-sensor scanners and machine-learning data processing: A novel instrumentation and data analysis method in heritage science <b>(Invited)</b> <i>R. Moreau, T. Calligaro, S. Hermon</i>	9:10 <b>Tu.A6.4</b> Manipulation of second harmonic generation in nanoscale nonlinear scattering media <b>(Invited)</b> <i>Xianfeng Chen</i>

9:50 <b>Tu.A1.5</b> Fiber dispersion and nonlinear compensation by multiple optical phase conjugation <i>Y. Jia, N. Hanik</i>	9:30 <b>Tu.A2.5</b> Efficient generation of squeezed light via spontaneous four-wave mixing in integrated structures <b>(Invited)</b> <i>A. Viola, L. Zatti, M. Liscidini</i>		9:50 <b>Tu.A4.5</b> Generation of hot surface plasmons in graphene by a powerful optical beam <b>(Invited)</b> <i>R. Dias, D. Cunha, M. Vasilevskiy</i>	9:30 <b>Tu.A6.5</b> Optomechanical and nonlinear applications in silicon photonics <b>(Invited)</b> <i>P. Nuño Ruano, J. Zhang, T. T. D. Dinh, D. González-Andrade, X. Le Roux, M. Montesinos-Ballester, C. Lafforgue, D. Medina-Quiroz, D. Benedkovic, P. Cheben, S. Edmond, D. Bouville, N. D. Lanzillotti-Kimura, D. Marris-Morini, E. Cassan, L. Vivien, C. Alonso-Ramos</i>
<b>Coffee break</b> (10:05 -10:40)	<b>Coffee break</b> (10:05-10:30)	<b>Coffee break</b> (9:45-10:15)	<b>Coffee break</b> (10:10-10:40)	<b>Coffee break</b> (9:50-10:20)
<b>ICTON &amp; MARS</b> Chair: <b>Carmen Mas Machuca</b> (10:40-11:20 Tuesday, July 4)	<b>QC I</b> Chair: <b>Nelson J. Muga</b> (10:30-12:05 Tuesday, July 4)	<b>B5GNeO II</b> Chair: <b>Jaume Comellas</b> (10:15-11:55 Tuesday, July 4)	<b>SWP IV</b> Chair: <b>Wilfried Blanc</b> (10:40-11:55 Tuesday, July 4)	<b>OMT III</b> Chair: <b>Juan M. Bueno</b> (10:20-11:55 Tuesday, July 4)
10:40 <b>Tu.B1.1</b> Experimental demonstration and results of cross-layer monitoring using OpenNOP: An open source network observability platform <b>(Invited)</b> <i>N. Ellsworth, S. Troia, Tianliang Zhang, M. Tacca, G. Maier, A. Fumagalli</i>	10:30 <b>Tu.B2.1</b> High-speed continuous-variable quantum key distribution with advanced digital signal processing <b>(Invited)</b> <i>M. Schiavon, Y. Piétri, L. Trigo Vidarte, D. Fruleux, M. Huguenot, B. Gouraud, A. Rhouni, P. Grangier, E. Diamanti</i>	10:15 <b>Tu.B3.1</b> ML-aided SOP compensation to increase key exchange rate in QKD systems <b>(Invited)</b> <i>M. Ahmadian, M. Ruiz, J. Comellas, L. Velasco</i>	10:40 <b>Tu.B4.1</b> Advanced photodetectors, sensors and energy harvesting devices <b>(Invited)</b> <i>J.-M. Nunzi</i>	10:20 <b>Tu.B5.1</b> Highlighting cerebral metastases using two-photon microscopy <b>(Invited)</b> <i>A. Enache, L. G. Eftimie, R. Hristu, A.-M. Graur, R. R. Glogojeanu, M. Sajin, G. A. Stanciu</i>
11:00 <b>Tu.B1.2</b> Cost-efficient capacity scaling using multi-wavelength transponders and adaptive modulation <b>(Invited)</b> <i>J. Müller, G. Di Rosa, A. Autenrieth, J.-P. Elbers, C. Mas-Machuca</i>	10:50 <b>Tu.B2.2</b> CV-QKD design for network integration <b>(Invited)</b> <i>H. H. Brunner, Chi-Hang, Fred Fung, M. Peev</i>	10:35 <b>Tu.B3.2</b> Secure optical communications based on fast cryptography <b>(Invited)</b> <i>L. Velasco, M. Iqbal, M. Ruiz</i>	11:00 <b>Tu.B4.2</b> Automatisation steps for laser direct writing <b>(Invited)</b> <i>R. Caspary, Lei Zheng, A. Günther, B. Roth</i>	10:40 <b>Tu.B5.2</b> Advances in optical coherence tomography <b>(Invited)</b> <i>A. Podoleanu</i>
	11:10 <b>Tu.B2.3</b> Efficient solutions for quantum secure communications in future optical networks <b>(Invited)</b> <i>M. Svaluto Moreolo, M. Iqbal, L. Nadal, R. Muñoz</i>	10:55 <b>Tu.B3.3</b> Reliable quantum communication <b>(Invited)</b> <i>M. Iqbal, L. Velasco, M. Ruiz</i>	<b>Tu.B4.3 (Cancelled)</b>	11:00 <b>Tu.B5.3</b> Applications of phasor data analysis on scattering scanning near-field optical microscopy investigations <b>(Invited)</b> <i>D. E. Tranca, A. Sobetkii, R. Hristu, S. G. Stanciu, C. Stoichita, G. A. Stanciu</i>
	11:30 <b>Tu.B2.4</b> Quantum virtual link generation via reinforcement learning <b>(Invited)</b> <i>R. Aparicio-Pardo, A. Cousson, R. A. Alliche</i>	11:15 <b>Tu.B3.4</b> Using a SNR digital twin for failure management <b>(Invited)</b> <i>L. Velasco, S. Barzegar, M. Ruiz</i>	11:20 <b>Tu.B4.4</b> Phase-matched magnetization-induced second-harmonic generation in epitaxial iron garnet thin films <b>(Invited)</b> <i>D. Guichaoua, I. Syvorotka, N. Syvorotka, R. Wielgosz, A. Andrushchak, H. El Karout, B. Sahraoui</i>	11:20 <b>Tu.B5.4</b> Advances and overcoming challenges in tomographic diffractive microscopy <b>(Invited)</b> <i>B. Simon, N. Verrier, M. Debailleul, O. Haerberlé</i>
	11:50 <b>Tu.B2.5</b> Multi-dimensional reconciliation encoder with quasi-cyclic LDPC codes on FPGA <i>M. Origlia, N. Andriolli, L. Maggiani, P. Castoldi, M. Secondini, E. Forestieri, T. Rydberg, T. Gehring</i>	11:35 <b>Tu.B3.5</b> Extending the OCATA digital twin to the frequency domain <b>(Invited)</b> <i>M. Devigili, M. Ruiz, N. Costa, C. Castro, A. Napoli, J. Pedro, L. Velasco</i>	11:40 <b>Tu.B4.5</b> Selected lanthanide complexes for nonlinear optical applications <i>H. El Karout, A. Andrushchak, Z. Sofiani, Y. El Kouari, B. Sahraoui</i>	11:40 <b>Tu.B5.5</b> Influence of deposition time on the opto-electronic properties of 400 °C annealed ITO thin films deposited by DC magnetron sputtering <i>I. Iordache, A. Sobetkii, E. Chitanu, G. B. Sparcea, V. Marinescu, C. A. Banciu, D. Pătroi</i>
<b>Lunch break</b> (11:20-13:30)	<b>Lunch break</b> (12:05-13:30)	<b>Lunch break</b> (11:55-13:30)	<b>Lunch break</b> (11:55-13:30)	<b>Lunch break</b> (11:55-13:30)
<b>POSTER Session (12:30-14:00 Tuesday, July 4)</b>				
<b>Tu.P.1</b> Grating-based structure for in-PIC temperature monitoring, <i>S. Pandey, A. E. Abejide, F. Rodrigues, M. Lima, A. Teixeira</i>	<b>Tu.P.2</b> 28 Gb/s high-speed signal generation using a hybrid modulation scheme, <i>A. Abejide, S. Pandey, M. Lima, A. Teixeira</i>	<b>Tu.P.3</b> Optimized method to reach the multi-pulse regime in mode-locked fibre laser, <i>A. Malfondet, P. Grelu, G. Millot, P. Tchofo-Dinda</i>	<b>Tu.P.4</b> Image denoising in femtosecond stimulated Raman scattering microscopy, <i>G. Costa, R. Ranjan, M. A. Ferrara, M. Sansone, L. Sirloto</i>	<b>Tu.P.5</b> Analysis of CVSS vulnerability base scores in the context of exploits' availability, <i>A. Balsam, M. Nowak, M. Walkowski, J. Oko, S. Sujecki</i>
<b>Tu.P.6</b> Impact of temperature on the structural and optical properties of red dye thin films, <i>A. Laouid, A. Alaoui-Belghiti, K. Wisniewski, P. Pióciennik, A. Hajjaji, A. Zawadzka</i>	<b>Tu.P.7</b> A cost effective FBG sensor system based on narrow band DBR laser and FPGA demodulation technology, <i>Yuchao Zhang, Kun Shang, Jianfei Gu, Mengxiao Li, Gang Zhao, Yaping Zhang</i>	<b>Tu.P.8</b> A study on DBR lasers and related demodulation technologies, <i>Jianfei Gu, Kun Shang, Yuchao Zhang, Mengxiao Li, Peng Song, Yanan Zhai, Xingwei Sun, Yaping Zhang</i>	<b>Tu.P.9</b> Possible impacts of extreme solar/cosmic activity on the mutation and evolution of coronavirus spike proteins, <i>Shaomin Yan, Guang Wu</i>	<b>Tu.P.10</b> 256-channel 10-GHz AWG demultiplexer for ultra-dense WDM, <i>D. Seyringer, S. Serecunova, F. Uherek, H. Seyringer, J. Chovan</i>
<b>Tu.P.11</b> Photodetection performances of MAPb <sub>3</sub> perovskites, <i>S. Soriano, O. E. Solis, D. Ramirez, P. P. Boix, J. P. Martínez-Pastor, I. Suárez</i>				
<b>Track 1 – Room 2.1</b>	<b>Track 2 – Room 2.2</b>	<b>Track 3 – Room 2.3</b>	<b>Track 4 – Room 3.1</b>	<b>Track 5 – Room 3.2</b>
<b>ACCESS I</b> Chair: <b>Josep Prat</b> (13:30-15:10 Tuesday, July 4)	<b>QC II</b> Chair: <b>Laura Ortiz</b> (13:30-15:20 Tuesday, July 4)	<b>B5GNeO III</b> Chair: <b>Jaume Comellas</b> (13:30-14:50 Tuesday, July 4)	<b>SWP V</b> Chair: <b>Ramon Herrero</b> (13:30-15:10 Tuesday, July 4)	<b>OMT IV</b> Chair: <b>Denis Tranca</b> (13:30-15:05 Tuesday, July 4)
13:30 <b>Tu.C1.1</b> The 6th generation fixed network (F6G): Vision and directions <b>(Invited)</b> <i>M. Brunner</i>	13:30 <b>Tu.C2.1</b> Oblivious keys for secure multiparty computation obtained from a CV-QKD <b>(Invited)</b> <i>A. N. Pinto, M. B. Santos, N. A. Silva, N. J. Muga, P. Mateus</i>	13:30 <b>Tu.C3.1</b> Optical network traffic analysis under B5G/6G RAN operation <b>(Invited)</b> <i>Shaoxuan Wang, M. Ruiz, L. Velasco</i>	13:30 <b>Tu.C4.1</b> Fiber optic sensor systems without using spectral analysis <b>(Invited)</b> <i>T. Benson, J. Palmowski, N. Kubicka, F. Golek, L. Benson, S. Phang, E. Beres-Pawlik</i>	13:30 <b>Tu.C5.1</b> Fiber photometry with tapered optical fibers: Exploiting mode-division to gain depth-resolution in brain tissue <b>(Invited)</b> <i>M. Bianco, M. Pisanello, A. Balena, F. Pisano, M. S. Andriani, C. Montinaro, L. Sileo, B. Spagnolo, M. De Vittorio, F. Pisanello</i>
13:50 <b>Tu.C1.2</b> Multi-RAT fiber-wireless technologies towards 6G networks <b>(Invited)</b> <i>C. Vagionas, R. Maximidis, K. Kanta, P. Toumasis, G. Giannoulis, D. Apostolopoulos, G. Kalfas, M. Gatzianas, A. Mesodiakaki, H. Avramopoulos, A. Miliou, N. Pleros</i>	13:50 <b>Tu.C2.2</b> BB84 decoy-state QKD protocol over long-distance optical fiber <b>(Invited)</b> <i>G. Guarda, D. Ribezzo, D. Salvoni, C. Bruscolo, P. Ercolano, M. Ejmaes, L. Parlato, I. Vagniluca, C. De Lazzari, T. Occhipinti, G. P. Pepe, A. Zavatta, D. Bacco</i>	13:50 <b>Tu.C3.2</b> CURSA-SQ models for time-sensitive networking <b>(Invited)</b> <i>M. Ruiz, D. Careglio, L. Velasco</i>	13:50 <b>Tu.C4.2</b> Simultaneous study of fluorescence and transmission based on a sensor with a doped optical fibre <b>(Invited)</b> <i>N. Kubicka, F. Golek, J. Palmowski, S. Phang, T. Benson, E. Beres-Pawlik</i>	13:50 <b>Tu.C5.2</b> Resonant multi-dielectric coverslip for enhanced total internal reflection fluorescence microscopy <b>(Invited)</b> <i>Y. Toumi, A. Mouttou, F. Lemarchand, G. Demesy, C. Koc, D. Muriaux, A. Moreau, J. Lumeau, C. Favard, A. L. Lereu</i>
14:10 <b>Tu.C1.3</b> F5G OpenLab: Enabling twin transition through ubiquitous fiber connectivity <b>(Invited)</b> <i>M. Balanici, B. Shariati, P. Safari, P. Chojecki, M. Chemnitz, D. Przewozny, J. K. Fische, R. Freund</i>	14:10 <b>Tu.C2.3</b> An FPGA-based physical layer approach for a CV-QKD transmitter <b>(Invited)</b> <i>G. Anjos, M. Almeida, J. Martins, N. Silva, N. Muga, A. Pinto</i>	14:10 <b>Tu.C3.3</b> SSMS: A split step multiband simulation software <b>(Invited)</b> <i>P. Khare, N. Costa, J. Pedro, A. Napoli, F. Arpanaei, J. Comellas, M. Ruiz, L. Velasco</i>	14:10 <b>Tu.C4.3</b> Tuning oxide nanoparticles in optical fibers <b>(Invited)</b> <i>Z. Lu, M. Cabié, M. Guzik, M. Ude, T. Neisius, D. Tosi, C. Molardi, F. Mady, M. Benabdesselam, F. Pigeonneau, W. Blanc</i>	14:10 <b>Tu.C5.3</b> Micro-fabricated optics for multiphoton microscopy <b>(Invited)</b> <i>R. Martínez Vázquez, A. Nardini, C. Conci, E. Jacchetti, M. Marini, D. Panzeri, L. Sironi, M. Bouzin, M. Collini, D. Inverso, B. S. Kariman, E. Kabouraki, M. Farsari, R. Osellame, G. Cerullo, M. T. Raimondi, G. Chirico</i>
				<b>Tu.C6.1 (Cancelled)</b>
				13:30 <b>Tu.C6.2</b> Spatiotemporal extreme events in spatially extended semiconductor lasers <b>(Invited)</b> <i>C. Rimoldi, L. Columbo, M. Eslami, S. Barland, F. Prati, G. Tissoni</i>
				13:50 <b>Tu.C6.3</b> Multimode, high photon number, quantum-enhanced sum frequency generation <b>(Invited)</b> <i>I. Afventi, T. Dickinson, G. Austrauskaitė, S. K. Rajendran, L. Hirsch, S. Nerenberg, C. Müllenbroich, A. Gatti, D. Faccio, M. Clerici, L. Caspani</i>

14:30 <b>Tu.C1.4</b> FDMA in point-to-multipoint fibre access systems for non-residential applications <b>(Invited)</b> <i>I. N. Cano, G. Caruso, Jinlong Wei, G. Talli, C. Bluemm, S. Calabro, H. von Kirchbauer, U. Wuensche, P. Leyva, H. Rongfang, Kuo Zhang, Zhicheng Ye</i>	14:30 <b>Tu.C2.4</b> Advances on the feasibility analysis of underwater optical communications <b>(Invited)</b> <i>M. Pinel, S. Cocchi, C. De Lazzari, M. Menchetti, T. Occhipinti, Al. Zavatta, D. Bacco</i>	14:30 <b>Tu.C3.4</b> Predicting loss in optical transport segments: A GNN-GRU approach for a nationwide optical network <b>(Invited)</b> <i>F. Donnangelo, I. Bianchi, A. Rodríguez, A. Castro</i>	14:30 <b>Tu.C4.4</b> Fiber interferometric sensors for monitoring the telecom infrastructure integrity <b>(Invited)</b> <i>M. Fasano, M. Brunero, A. Madaschi, J. Morosi, M. Ferrario, P. Boffi</i>	14:30 <b>Tu.C5.4</b> Second harmonic generation microscopy of the living human eye: Limitations, performance and image improvement <b>(Invited)</b> <i>J. M. Bueno, R. M. Martínez-Ojeda, F. J. Ávila, P. Artal</i>	14:30 <b>Tu.C6.4</b> Holographic and nonlinear optical study of natural photonic structures: Where biology meets physics <b>(Invited)</b> <i>M. Simović Pavlović, B. Bokić, C. Verstraete, D. Vasiljević, S. R. Mouchet, T. Verbiest, B. Kolaric</i>
14:50 <b>Tu.C1.5</b> Point-to-multipoint coherent transceivers for next-generation mobile transport <b>(Invited)</b> <i>C. Castro, A. Tartaglia, R. Magri, B. Spinnler, J. Pedro, A. Napoli</i>	14:50 <b>Tu.C2.5</b> AI-assisted polarization basis alignment for quantum key distribution system receivers <i>S. T. Mantey, N. A. Silva, A. N. Pinto, N. J. Muga</i>		14:50 <b>Tu.C4.5</b> Optical fiber sensors based on lossy mode resonances (LMRs): Fundamentals and recent developments <b>(Invited)</b> <i>J. J. Imas, I. Del Villar, C. R. Zamarreño, I. R. Matias</i>	14:50 <b>Tu.C5.5</b> Third order nonlinear optical correlators in a 4f configuration <i>J.-B. Zinoune, M. Chis, G. Boudebs</i>	
	15:05 <b>Tu.C2.6</b> Free-space QKD link supported by AI algorithm <i>S. Cocchi, C. Pereti, G. Guarda, D. Ribezzo, M. Pinel, M. Menchetti, C. De Lazzari, T. Occhipinti, A. Zavatta, D. Bacco</i>				

<b>Coffee break (15:10-15:40)</b>		<b>Coffee break (15:20-15:50)</b>		<b>Coffee break (14:50-15:20)</b>		<b>Coffee break (15:10-15:40)</b>		<b>Coffee break (15:05-15:30)</b>		<b>Coffee break (14:30-15:00)</b>	
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<b>ACCESS II</b> <i>Chair: Ivan Cano (15:40-17:00 Tuesday, July 4)</i>		<b>QC III</b> <i>Chair: Nuno A. Silva (15:50-17:40 Tuesday, July 4)</i>		<b>MALOC II</b> <i>Chair: Carlos Natalino (15:20-16:55 Tuesday, July 4)</i>		<b>SWP VI</b> <i>Chair: Bouchta Sahraoui (15:40-17:15 Tuesday, July 4)</i>		<b>WeinTel</b> <i>Chair: Sima Barzegar &amp; Pantea Nadimi Goki (15:30-16:50 Tuesday, July 4)</i>		<b>PNPA IV</b> <i>Chair: Luigi Sirloto (15:00-16:00 Tuesday, July 4)</i>	
15:40 <b>Tu.D1.1</b> SOA-based optical networks with sub-microsecond control plane for low-latency applications <b>(Invited)</b> <i>H. Santana, A. Mefleh, N. Calabretta</i>	15:50 <b>Tu.D2.1</b> The Madrid testbed: QKD SDN control and key management in a production network <b>(Invited)</b> <i>V. Martín, J. P. Brito, L. Ortiz, R. Brito-Méndez, R. Vicente, J. Saez-Buruaga, A. J. Sebastian, D. G. Aguado, M. I. García-Cid, J. Setien, P. Salas, C. Escribano, E. Dopazo, J. Rivas-Moscoco, A. Pastor-Perales, D. Lopez</i>	15:20 <b>Tu.D3.1</b> A machine learning-based approach for nonlinearly compensation in subcarrier multiplexing system <b>(Invited)</b> <i>W. S. Saif, S. K. Orappanpara Soman, O. A. Dobre</i>	15:40 <b>Tu.D4.1</b> Modal analysis of acoustic resonances in an optical fiber: All-optical excitation and detection <b>(Invited)</b> <i>L. A. Sánchez, C. A. Álvarez-Ocampo, M. Delgado-Pinar, A. Diez, J. L. Cruz, M. V. Andrés</i>	15:30 <b>Tu.D5.1</b> Long-term capacity planning in flexible optical networks <b>(Invited)</b> <i>C. Mas Machuca, J. Müller</i>	15:00 <b>Tu.D6.1</b> Two-micron wavelength dual-comb spectrometer using a new design of dispersion-controlled highly nonlinear fibre <b>(Invited)</b> <i>A. Malfondet, M. Deroh, A. Parriaux, S.-E. Ahmedou, R. Dauliat, L. Labonté, S. Tanzilli, J.-C. Delagnes, P. Roy, R. Jamier, G. Millot</i>						
16:00 <b>Tu.D1.2</b> Band evaluation of coherent udWDM-PON with paired lasers <b>(Invited)</b> <i>J. Segarra, V. Sales, J. Prat</i>	16:10 <b>Tu.D2.2</b> Integration of the QKD layer in fibre networks using multicore fibres <b>(Invited)</b> <i>A. Gagliano, A. Gatto, P. Martelli, P. Boffi, T. Hayashi, A. Mecozzi, C. Antonelli, P. Parolari</i>	15:40 <b>Tu.D3.2</b> A comparison of machine learning techniques for fiber non-linearity compensation: Multilayer perceptron vs. learned digital backpropagation <b>(Invited)</b> <i>A. Sotomayor, E. Pincemin, V. Choqueuse, M. Morvan</i>	16:00 <b>Tu.D4.2</b> Early-warning debris flow and avalanches detection system based on optical fiber polarization sensing <b>(Invited)</b> <i>G. Rizzelli, S. Pellegrini, M. Lacidogna, S. Aiassa, F. Antolini, A. Insana, M. Barla, R. Gaudio</i>	15:50 <b>Tu.D5.2</b> Intent-based networking: Current advances, open challenges, and future directions <b>(Invited)</b> <i>M. Gharbaoui, B. Martini, P. Castoldi</i>	15:20 <b>Tu.D6.2</b> Injection-seeded terahertz parametric generation using high power seeding <b>(Invited)</b> <i>S. Mine, K. Murate, K. Kawase</i>						
16:20 <b>Tu.D1.3</b> PIC-based transceiver for access networks: Package and functionalities verification towards a commercial solution <b>(Invited)</b> <i>F. Rodrigues, J. Santos, C. Rodrigues, H. Neto, A. Teixeira</i>	16:30 <b>Tu.D2.3</b> Atomic ensembles as nodes of quantum and classical optical networks <b>(Invited)</b> <i>M. Parniak, M. Mazelanik, A. Leszczyński, M. Lipka, M. Jastrzębski, S. Kurzyrna, B. Niewelt, J. Nowosielski, S. Borówka, U. Pylipenko, W. Wasilewski</i>	16:00 <b>Tu.D3.3</b> Machine Learning-based polarization drift compensation for high speed DV-QKD homodyne receiver <b>(Invited)</b> <i>M. F. Ramos, E. Gutmann, H. Hübel</i>	16:20 <b>Tu.D4.3</b> Lab-on-chip for liquid biopsies <b>(Invited)</b> <i>C. Ciminelli, P. Colapietro, G. Brunetti, M. N. Armenise</i>	16:10 <b>Tu.D5.3</b> Photonic and quantum communication technologies for optical networks evolution <b>(Invited)</b> <i>M. Svaluto Moreolo, L. Nadal, J. M. Fabrega, J. Vilchez</i>	15:40 <b>Tu.D6.3</b> Intense sub-half-cycle terahertz waveforms for lightwave-driven scanning tunnelling microscopy <b>(Invited)</b> <i>C. Meineke, M. Prager, J. Hayes, Qiannan Wen, L. Z. Kastner, D. Bougeard, M. Kira, R. Huber</i>						
16:40 <b>Tu.D1.4</b> Optical DACs for ultra-high-speed green photonic interconnects <b>(Invited)</b> <i>M. Nazarathy, I. Tomkos</i>	16:50 <b>Tu.D2.4</b> Effect of pointing errors on BER performance of multidimensional LDPC-coded OAM channels <b>(Invited)</b> <i>G. T. Djordjevic, I. B. Djordjevic</i>	16:20 <b>Tu.D3.4</b> Microresonator-based photonic neural network <b>(Invited)</b> <i>S. Biasi, L. Pavesi</i>	16:40 <b>Tu.D4.4</b> Spin and orbital angular momenta in biomedical diagnosis and tissues characterisation <b>(Invited)</b> <i>I. Meglinski, I. Lopushenko, A. Sdobnov, A. Bykov</i>	16:30 <b>Tu.D5.4</b> Dynamic subcarrier allocation for P2MP connections <b>(Invited)</b> <i>H. Shakespear-Miles, M. Ruiz, L. Velasco</i>							
	17:10 <b>Tu.D2.5</b> A model-driven satellite quantum communication simulator <i>A. Sebastián-Lombrana, U. Martínez Córdova, J. P. Brito, V. Martín, L. Ortiz</i>	16:40 <b>Tu.D3.5</b> Machine learning for real-time anomaly detection in optical networks <i>S. Behera, T. Panayiotou, G. Ellinas</i>	17:00 <b>Tu.D4.5</b> A pilot study using biospeckle photography for optical breast cancer screening <i>D. Youssef, T. Ismail, S. A. M. Soliman, J. El-Azab</i>								
	17:25 <b>Tu.D2.6</b> VPN protection with QKD-derived keys using standard interfaces <i>J. S. Buruaga, H. H. Brunner, F. Fung, M. Peev, A. Pastor, D. R. López, L. Ortiz, V. Martín, J. P. Brito</i>										

19:30-22:30 <b>Dinner at Hanu' Berarilor Elena Lupescu</b> (Brewer's Inn Elena Lupescu)											
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<b>Wednesday, July 5</b>											
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<b>Track 1 – Room 2.1</b>		<b>Track 2 – Room 2.2</b>		<b>Track 3 – Room 2.3</b>		<b>Track 4 – Room 3.1</b>		<b>Track 5 – Room 3.2</b>		<b>Track 6 – Room 4.1</b>	
<b>ACCESS &amp; PhotoMAN</b> <i>Chair: Michela Svaluto Moreolo (8:30-9:50 Wednesday, July 5)</i>		<b>QC IV</b> <i>Chair: Nelson J. Muga (8:30-10:10 Wednesday, July 5)</i>		<b>TECHto6G &amp; OSCto5G</b> <i>Chair: Hamzeh Khalili (8:30-9:30 Wednesday, July 5)</i>		<b>SWP VII</b> <i>Chair: Anna Zawadzka (8:30-9:40 Wednesday, July 5)</i>		<b>OMT &amp; LFSRS</b> <i>Chair: Radu Hristu (8:30-9:30 Wednesday, July 5)</i>		<b>PICAW II</b> <i>Chair: František Uherek (8:30-10:10 Wednesday, July 5)</i>	
8:30 <b>We.A1.1</b> ML-based optimization of geometric constellation shaping for unamplified coherent optical systems <b>(Invited)</b> <i>B. M. Oliveira, M. S. Neves, F. P. Guiomar, M. C. R. Medeiros, P. P. Monteiro</i>	8:30 <b>We.A2.1</b> Prospects of chip-based multi-protocol quantum key distribution transceivers <b>(Invited)</b> <i>A. Grebenschukov, Hui Lui, G. Nazariok, B. Cimoli, S. Rommel, I. Tafur Monroy</i>	8:30 <b>We.A3.1</b> Optimizing resource allocation in long-reach PONs for improved performance in 6G networks <b>(Invited)</b> <i>A. Hastrup, M. Zehri, D. Rincón, J. R. Piny</i>	8:30 <b>We.A4.1</b> Nanoparticles for optical sensing detection, tumor imaging and therapy in biomedicine <b>(Invited)</b> <i>Aiguu Wu</i>	8:30 <b>We.A5.1</b> Super-resolution imaging of plasmonic and dielectric nanostructures by using photothermal scattering nonlinearity <b>(Invited)</b> <i>K. Nishida, Shi-Wei Chu</i>	8:30 <b>We.A6.1</b> Using Bayesian techniques to accelerate the design of silicon photonics reservoirs <b>(Invited)</b> <i>A. Katumba, J. Mikelson, M. P. Matovic, J. Dambre, P. Bienstman</i>						
8:50 <b>We.A1.2</b> Performance evaluation of high data rate transmission and optically powered IoT ecosystem over SI-POF for smart home applications <b>(Invited)</b> <i>F. M. A. Al-Zubaidi, D. S. Montero, P. J. Pinzón, C. Vázquez</i>	8:50 <b>We.A2.2</b> Photonic integrated circuits and components for quantum key distribution <b>(Invited)</b> <i>D. Cano, D. Balado, V. Fernández</i>	8:50 <b>We.A3.2</b> Dynamic service placement in 6G multi-cloud scenarios <b>(Invited)</b> <i>F. Tabatabaei, H. Khalili, M. Requena, S. Kahvazadeh, J. Mangues-Bafalluy</i>	8:50 <b>We.A4.2</b> Evolutional analysis of coronavirus spike proteins with big-data <b>(Invited)</b> <i>Shaomin Yan, Guang Wu</i>	8:50 <b>We.A5.2</b> Accurate estimation of non-resonant far-field superresolution by a glass microparticle <b>(Invited)</b> <i>C. Simovski, R. Heydari</i>	8:50 <b>We.A6.2</b> Numerical modelling and characterization of active silicon ring resonators <b>(Invited)</b> <i>K. Jamshidi, M. Catuneanu, M. He, A. Shetewy, A. Zarif, S. Dev, H. Vithalani, S. Fang, D. Heydari, R. Hamerly, H. Mabuchi</i>						
9:10 <b>We.A1.3</b> Experimental demonstration of a 400 Gb/s full coherent transmission in an in-field metro-access scenario <b>(Invited)</b> <i>M. Casasco, G. Rizzelli, A. Pagano, R. Mercinelli, M. Valvo, V. Ferrero, R. Gaudino</i>	9:10 <b>We.A2.3</b> Scalable quantum signal processing with integrated photonics and fiber-based modules <b>(Invited)</b> <i>N. Montaut, P. Roztocky, Hao Yu, S. Sciara, M. Chemnitz, Y. Jestin, B. MacLellan, B. Fischer, M. Kues, C. Reimer, L. Romero Cortes, B. Wetzel, Yanbing Zhang, S. Loranger, R. Kashyap, A. Cino, S. T. Chu, B. E. Little, D. J. Moss, L. Caspani, W. J. Munro, J. Azaña, R. Morandotti</i>	9:10 <b>We.A3.3</b> Secure and agile 6G networking – Quantum and AI enabling technologies <b>(Invited)</b> <i>C. R. Garcia, O. Bouchmal, C. Stan, Pa. Giannakopoulos, B. Cimoli, J. J. Vegas Olmos, S. Rommel, I. Tafur Monroy</i>	9:10 <b>We.A4.3</b> <b>(Cancelled)</b>	9:10 <b>We.A5.3</b> Noise investigation in femtosecond stimulated Raman scattering microscopy <b>(Invited)</b> <i>R. Ranjan, G. Costa, M. A. Ferrara, M. Sansone, L. Sirloto</i>	9:10 <b>We.A6.3</b> Research progress on cavity-resonator-integrated guided-mode resonance mirror for Gaussian beam <b>(Invited)</b> <i>K. Kintaka, A. Watanabe, J. Inoue, S. Ura</i>						
9:30 <b>We.A1.4</b> Investigation of mid-term migration scenarios to multi-band solutions in metropolitan networks <b>(Invited)</b> <i>J. P. Fernández-Palacios, F. Arpanaei, J. M. Rivas-Moscoco, J. A. Hernández, D. Larrabeti</i>	9:30 <b>We.A2.4</b> Programmable silicon photonic sources of frequency bin entangled qubits and qubits <b>(Invited)</b> <i>M. Borghi, N. Tagliavacche, M. Clementi, F. A. Sabatoli, L. Gianini, H. El Dirani, L. Youssef, N. Bergamasco, C. Petit-Etienne, E. Pargon, J. E. Sipe, M. Liscidini, C. Sciancalepore, M. Galli, D. Bajoni</i>		9:10 <b>We.A4.4</b> Indoor obstacle detector for visual impaired persons <i>R. Papara, L. Buzura, R. Galatus</i>		9:30 <b>We.A6.4</b> Silicon ring resonator with phase-change material as a plastic dynamical node for scalable all-optical neural networks with synaptic plasticity <b>(Invited)</b> <i>A. Lugnan, S. Garcia-Cuevas Carrillo, J. Song, S. Aggarwal, F. Brücknerhoff-Plückelmann, W. H. P. Pernice, H. Bhaskaran, C. D. Wright, P. Bienstman</i>						

	9:50 <b>We.A2.5</b> Towards practical QD-based single photon sources in the telecom range ( <b>Invited</b> ) G. Sek		9:25 <b>We.A4.5</b> Chemical sensor utilizing a new type of D-shaped optical fiber S. Pulikottil Alex, G. Stepniowski, A. Baltuška, R. Buczyński, I. Bugár		9:50 <b>We.A6.5</b> Resonance anomalous dispersion, Kerr comb, and lasing in hybrid TeO <sub>2</sub> -coated Si <sub>3</sub> N <sub>4</sub> waveguides ( <b>Invited</b> ) H. M. Mbonde, B. L. Segat Frare, T. Wildi, P. Torab Ahmadi, B. Hashemi, D. B. Bonneville, T. Herr, J. D. B. Bradley
<b>Coffee break</b> (9:50-10:20)	<b>Coffee break</b> (10:10-10:40)	<b>Coffee break</b> (9:30-10:00)	<b>Coffee break</b> (10:00-10:30)	<b>Coffee break</b> (9:30-10:00)	<b>Coffee break</b> (10:10-10:40)
<b>OWW I</b> Chair: <b>Giulio Cossu</b> (10:20-12:20 Wednesday, July 5)	<b>QC V</b> Chair: <b>Gustavo Anjos</b> (10:40-11:50 Wednesday, July 5)	<b>SDN-NFV &amp; OptSoft &amp; NetOrch</b> Chair: <b>Nathan Andrew Ellsworth</b> (10:00-11:40 Wednesday, July 5)	<b>SWP VIII</b> Chair: <b>Marco Saldutti</b> (10:30-11:45 Wednesday, July 5)	<b>NOA</b> Chair: <b>Pawel Rosa</b> (10:00-11:55 Wednesday, July 5)	<b>PICAW II</b> Chair: <b>Alessio Lugnan</b> (10:40-12:30 Wednesday, July 5)
10:20 <b>We.B1.1</b> Li-Fi and visible light communication for smart cities and industry 4.0: Challenges, research and market status in 2023 ( <b>Invited</b> ) V. Georlette, V. Moeyaert	We.B2.1 ( <b>Cancelled</b> )	10:00 <b>We.B3.1</b> Network programmability for smart factory mobile robotics: The SmartEdge project approach ( <b>Invited</b> ) P. Castoldi, L. Ismail, F. Paolucci, F. Cugini, D. Bowden	10:30 <b>We.B4.1</b> Basic theoretical and numerical concepts of photovoltaics ( <b>Invited</b> ) A. Quandt	10:00 <b>We.B5.1</b> Development of Raman amplifiers over the last 10 years ( <b>Invited</b> ) P. Rosa	10:40 <b>We.B6.1</b> Enhancing the performance of waveguide-integrated superconducting nanowire single-photon detectors using subwavelength grating metamaterials ( <b>Invited</b> ) A. Sánchez-Postigo, C. Graham-Scott, C. Schuck
11:05 <b>We.B1.2</b> Advanced digital signal processing for high-capacity mode-division multiplexed free-space optical communications ( <b>Invited</b> ) Zhouyi Hu, Zhaozhong Chen, Yiming Li, D. M. Benton, A. A. I. Ali, M. Patel, M. P. J. Lavery, A. D. Ellis	10:40 <b>We.B2.2</b> A network server for distributing quantum random numbers ( <b>Invited</b> ) N. A. Silva, M. Ferreira, M. A. Carvalho, A. Souto, N. Paunković, P. Mateus, A. Teixeira, A. N. Pinto	10:20 <b>We.B3.2</b> Complexity and accuracy trade-off for quality of transmission estimation in wideband optical systems ( <b>Invited</b> ) A. Souza, N. Costa, J. Pedro, J. Pires	10:50 <b>We.B4.2</b> Hybrid perovskites thin films – Temperature changes of properties ( <b>Invited</b> ) A. Zawadzka, A. Marjanowska, A. Laouid, K. Wiśniowski, P. Plóciennik	10:15 <b>We.B5.2</b> Pulsed ultralong ultrafast ring fiber oscillators ( <b>Invited</b> ) J. D. Ania Castañón, I. C. Pablo, F. Gallazzi, P. Corredera	11:00 <b>We.B6.2</b> Group IV mid-infrared photonic devices and applications ( <b>Invited</b> ) D. J. Rowe, L. Reid, Chen Wei, C. J. Stirling, C. J. Mitchell, Han Du, Xingzhao Yan, D. T. Tran, Yangbo Wu, M. Banakar, Yanli Qi, A. Osman, Ke Li, J. Soler Penades, Longqi Zhou, K. M. Groom, J. Heffernan, C. G. Littlejohns, M. Nedeljkovic, G. Z. Mashanovich
11:35 <b>We.B1.3</b> A portable ambient optical noise measurement station ( <b>Invited</b> ) Á. Schranz, E. Udvary, B. Matolcsy, L. Bacsárdi, A. Nagy	We.B2.3 ( <b>Cancelled</b> )	10:40 <b>We.B3.3</b> Dynamic traffic prediction model retraining for autonomous network operation ( <b>Invited</b> ) F. Tabatabaeimehr, L. Velasco, M. Ruiz, H. Khalili, R. Aparicio-Pardo	11:10 <b>We.B4.3</b> Examples of perovskite solar cells construction and techniques for measuring their basic electrical parameters ( <b>Invited</b> ) P. Plóciennik, A. Zawadzka, K. Wiśniowski, A. Laouid, A. Marjanowska, Z. Łukasik	10:35 <b>We.B5.3</b> Supporting data traffic growth with low cost amplification solutions ( <b>Invited</b> ) C. Cruz, Q. Hochart, A. Wilk, O. Delorme, R. S. Joshya, A. Balocchi, N. Vaissière, J. Decobert, C. Calo, H. Carrere	11:20 <b>We.B6.3</b> Opto-electronic devices based on refractory and 2D materials ( <b>Invited</b> ) I. A. M. Al-Ani, K. As'Ham, S. Akter, S. Abdo, Ziyuan Li, H. T. Hattori
11:55 <b>We.B1.4</b> Covert optical communication over turbulent terrestrial free-space optical link ( <b>Invited</b> ) V. Nafria, I. B. Djordjevic	11:00 <b>We.B2.4</b> Probable prime generation from a quantum randomness source M. J. Ferreira, A. Carvalho, N. A. Silva, A. N. Pinto, N. J. Muga	11:00 <b>We.B3.4</b> Control and orchestration solutions for end-to-end time sensitive services in future 6G networks ( <b>Invited</b> ) S. Spadaro, F. Agraz, A. Pagès Cruz	11:30 <b>We.B4.4</b> Perovskite thin films for optoelectronic devices: Study of their stability A. Marjanowska, A. Zawadzka, B. Sahraoui, D. Guichaoua, P. Plóciennik	10:55 <b>We.B5.4</b> Fibre optical parametric amplifiers for communications ( <b>Invited</b> ) V. Gordienko, C. Gaur, F. Bessin, F. M. Ferreira, N. J. Doran	11:40 <b>We.B6.4</b> Design and optimization of broadband optical duplexer and triplexer couplers ( <b>Invited</b> ) A. Thottoli, A. S. VorobeV, G. Biagi, S. Iadanza, G. Magno, L. O'Faolain, M. Grande
12:15 <b>We.B1.5</b> Multi-wavelength entanglement distribution over turbulent free-space optical link with wavefront corrections from adaptive optics V. Nafria, I. B. Djordjevic	11:15 <b>We.B2.5</b> Feasibility analysis of uplink quantum communication with HAP considering beam wandering and weather dependence ( <b>Invited</b> ) N. Alshaer, T. Ismail	11:20 <b>We.B3.5</b> Neural graphs: An effective solution for the resource allocation in NFV sites interconnected by elastic optical networks ( <b>Invited</b> ) V. Eramo, F.G. Lavacca, F. Valente, V. Filippetti, A. Rosato, A. Verdene, M. Panella		11:15 <b>We.B5.5</b> Pump RIN to carrier phase noise transfer in distributed fiber Raman system evaluated through carrier FM noise spectrum ( <b>Invited</b> ) R. Hui, A. Dutta, Y. Akasaka	12:00 <b>We.B6.5</b> Control of light in the non-adiabatic regime in integrated optical waveguides A. Sheveleva, M. Leonardo, C. Finot, P. Colman
	11:35 <b>We.B2.6</b> Performance analysis of passive decoy-state quantum key distribution M. Di Giancamillo, A. Gatto, M. Martinelli, P. Martelli			11:35 <b>We.B5.6</b> Optical phase conjugation (OPC) in a silicon-smectic A liquid crystal (SALC) optical waveguide ( <b>Invited</b> ) B. I. Lembrikov, D. lanetz, Y. Ben-Ezra	12:15 <b>We.B6.6</b> 3D polymer based 1×4 multimode interference splitter S. Serecunova, T. Mizera, D. Seyringer, D. Pudis, F. Uherek, H. Seyringer
<b>Lunch break</b> (12:20-13:50)	<b>Lunch break</b> (12:20-14:10)	<b>Lunch break</b> (11:40-13:10)	<b>Lunch break</b> (11:45-13:20)	<b>Lunch break</b> (11:55-13:20)	<b>Lunch break</b> (12:30-14:00)
<b>OWW II</b> Chair: <b>Hovik Baghdasaryan</b> (13:50-14:50 Wednesday, July 5)	<b>DCN &amp; DACINT</b> Chair: <b>Sylwester Latkowski</b> (14:10-15:15 Wednesday, July 5)	<b>WAOR</b> Chair: <b>Salvatore Spadaro</b> (13:10-15:05 Wednesday, July 5)	<b>SWP IX</b> Chair: <b>Trevor Benson</b> (13:20-14:50 Wednesday, July 5)	<b>ESPC</b> Chair: <b>Crina Cojocaru</b> (13:20-14:20 Wednesday, July 5)	<b>PICAW &amp; PAM</b> Chair: <b>Ana Quirce</b> (14:00-16:00 Wednesday, July 5)
13:50 <b>We.C1.1</b> Blue lasers for optical wireless communications ( <b>Invited</b> ) S. Watson, S. P. Najda, P. Perlin, T. Suski, L. Marona, M. Leszczynski, S. Stanczyk, D. Schiavon, T. J. Slight, A. E. Kelly	14:10 <b>We.C2.1</b> Enabling high capacity WDM transmission systems for data centre and access networking applications ( <b>Invited</b> ) M. T. Costas, L. N. Venkatasubramani, A. G. Reza, M. McCarthy, C. Browning, L. Barry	13:10 <b>We.C3.1</b> prisma-v2: Extension to cloud overlay networks ( <b>Invited</b> ) R. A. Alliche, T. Da Silva Barros, R. Aparicio-Pardo, L. Sassatelli	13:20 <b>We.C4.1</b> Subwavelength-engineered metamaterial devices for integrated photonics ( <b>Invited</b> ) P. Cheben, J. H. Schmid, P. Ginel-Moreno, S. Khajavi, R. Korček, W. Fraser, D. Sirmaci, A. F. Hinestrosa, J. M. Luque-González, D. Pereira-Martin, A. Sánchez-Postigo, A. Hadji-El Houati, D. Benediković, A. Ortega-Moñux, J. G. Wangüemert-Pérez, I. Molina-Fernández, R. Halir, W. N. Ye, D. Melati, C. Alonso-Ramos, D. González-Andrade, L. Vivien, I. Staudte, J. Zhang, M. Milanizadeh, D.-X. Xu, Y. Grinberg, R. Cheriton, S. Janz, S. Wang, M. Vachon, M. Dado, R. Fernández de Cabo, A. V. Velasco	13:20 <b>We.C5.1</b> Design and optimization of doubly resonant second harmonic generation in photonic crystal cavities based on a bound state in the continuum ( <b>Invited</b> ) Jun Wang, M. Clementi, J.-F. Carlin, A. Barone, M. Galli, D. Gerace, N. Grandjean, R. Houdré	14:00 <b>We.C6.1</b> Refractive index sensing using a photonic crystal hybrid external cavity laser ( <b>Invited</b> ) L. O'Faolain, T. Oliveira, F. Atar, Y. Arafat, M. Grande, S. Iadanza, B. Corbett
14:10 <b>We.C1.2</b> Multi-user visible light communication and positioning system based on multiplexing technology ( <b>Invited</b> ) Changyuan Yu, Zhongxu Liu, Jing Zhou	14:30 <b>We.C2.2</b> Efficient workload consolidation for composable/disaggregated data centers considering migration cost Chao Guo, M. Zukerman	13:30 <b>We.C3.2</b> Low-cost all-optical switching nodes for ultra-dense optical metro-access networks ( <b>Invited</b> ) S. Sarmiento, J. A. Lázaro	13:40 <b>We.C4.2</b> Guided mode resonance-based transparent metasurfaces for selective multi-color reflection ( <b>Invited</b> ) G. Magno, M. Grande, B. Dagens, O. Gauthier Lafaye, A. D'Orazio	13:40 <b>We.C5.2</b> Surface states in topologically trivial and non-trivial photonic crystals ( <b>Invited</b> ) A. C. Tazolamprou, M. Kafesaki, C. M. Soukoulis, E. N. Economou, T. Koschny	14:20 <b>We.C6.2</b> Waveguide amplifiers and lasers based on FASn13 perovskite thin films ( <b>Invited</b> ) I. Suárez, H. P. Adl, V. S. Chirvony, J. Sánchez-Díaz, R. S. Sánchez, I. Mora-Seró, J. P. Martínez-Pastor
14:30 <b>We.C1.3</b> Using regular semiconductor illumination arrays (connected via power line communications) for visible light sensing ( <b>Invited</b> ) E. Leitgeb, P. Bekhrad, K. Madane	We.C2.3 ( <b>Cancelled</b> )	13:50 <b>We.C3.3</b> A minimal idleness algorithm for spectrum assignment on a single elastic link under dynamic traffic ( <b>Invited</b> ) H. Waldman, R. C. Bortoletto, V. F. de Souza, R. C. A. Almeida Jr.	14:00 <b>We.C4.3</b> Novel photonic materials enabled by crystal growth ( <b>Invited</b> ) D. A. Pawlak, P. Paszka, P. Piotrowski, M. Tomczyk, K. Sadecka, K. Bandopadhyay, K. Markus, H. B. Surma, A. Matera, J. Toudert	14:00 <b>We.C5.3</b> Optical heterostructures based on one-dimensional four-component photonic crystals ( <b>Invited</b> ) A. Biswal, D. -J. Jwo, H. Behera, G. V. Morozov, I. L. Lyubchanskii	14:40 <b>We.C6.3</b> High efficiency and high-speed silicon optical modulators ( <b>Invited</b> ) D. J. Thomson, W. Zhang, M. Ebert, K. Li, B. Chen, S. Liu, W. Cao, F. Meng, X. Yan, H. Du, M. Banakar, D. T. Tran, C. G. Littlejohns, G. T. Reed
	14:45 <b>We.C2.4</b> Data rate vs. maximum reach in a data center interconnect scenario exploiting wideband InP Mach-Zehnder modulators R. D'Ingillo, G. Borracchini, E. Virgilito, S. Straullu, R. Stano, M. Belmonte, V. Curri	14:10 <b>We.C3.4</b> Multipath provisioning for survivable elastic optical networks with optimized RSA ordering selection ( <b>Invited</b> ) H. A. Dinarte, G. W. Teixeira, R. C. Almeida Jr., K. D. R. Assis, H. Waldman, D. A. R. Chaves	14:20 <b>We.C4.4</b> Subwavelength slot silicon optomechanical waveguide for enhanced Brillouin gain D. González-Andrade, P. Nuño-Ruano, Jianhao Zhang, E. Cassan, D. Marris-Morini, L. Vivien, N. D. Lanzillotti-Kimura, C. Alonso-Ramos	14:35 <b>We.C4.5</b> Silicon optomechanical membrane waveguides based on subwavelength engineering of photons and phonons P. Nuño Ruano, J. Zhang, X. Le Roux, D. Melati, D. González-Andrade, E. Cassan, D. Marris-Morini, L. Vivien, N. D. Lanzillotti-Kimura, C. Alonso-Ramos	15:00 <b>We.C6.4</b> Coupled aperture VCSELS suitable for 100 GHz intensity modulation ( <b>Invited</b> ) M. Lindemann, N. C. Gerhardt, M. R. Hofmann, N. Ledentsov Jr., V. A. Shchukin, N. N. Ledentsov, O. Yu. Makarov, Ł. Chorchos, J. P. Turkievicz
	15:00 <b>We.C2.5</b> WDM/TDM over passive optical networks with cascaded-AWGRs for data centers M. Alharthi, S. H. Mohamed, T. E. H. El-Gorashi, J. M. H. Elmighani	14:30 <b>We.C3.5</b> Performance analysis of multi-layer optical networks with time-varying traffic ( <b>Invited</b> ) A. Knapieńska, P. Lechowicz, S. Spadaro, K. Walkowiak			15:20 <b>We.C6.5</b> High gain erbium doped aluminium oxide waveguide amplifiers ( <b>Invited</b> ) C. E. Osornio-Martinez, D. Bonneville, M. Dijkstra, S. M. Garcia-Blanco
		14:50 <b>We.C3.6</b> Efficient dynamic routing in elastic optical networks based on traffic prediction and bandwidth reservation R. Gościñ			15:40 <b>We.C6.6</b> Exploring Kerr frequency comb generation with yttria stabilized zirconia (YSZ) crystalline microcavities ( <b>Invited</b> ) Guoping Lin
<b>Coffee break</b> (14:50-15:20)	<b>Coffee break</b> (15:15-15:45)	<b>Coffee break</b> (15:05-15:30)		<b>Coffee break</b> (14:20-14:50)	<b>Coffee break</b> (16:00-16:30)

<p><b>OWW III</b>  <b>Chair: Pasha Bekhrad</b>  <b>(15:20-17:00 Wednesday, July 5)</b></p> <p>15:20 <b>We.D1.1</b> Intra-satellite optical wireless communications in relevant environments <b>(Invited)</b>  <i>L. Gilli, G. Cossu, N. Vincenti, F. Bresciani, E. Pifferi, V. Schena, E. Ciaramella</i></p> <p>15:40 <b>We.D1.2</b> Design challenges in high throughput WDM-FSO systems for satellite communications <b>(Invited)</b>  <i>G. Cossu, V. Spirito, M. Ninos, E. Ciaramella</i></p> <p>16:00 <b>We.D1.3</b> Sigma-delta modulation for enhanced underwater optical wireless communication systems <b>(Invited)</b>  <i>J. H. Araújo, H. J. Rocha, J. S. Tavares, H. M. Salgado</i></p> <p>16:20 <b>We.D1.4</b> Integrated optical phased arrays for on-chip communication <b>(Invited)</b>  <i>M. Khalid, G. Calò, G. Bellanca, J. Nanni, M. Barbiroli, F. Fuschini, V. Tralli, D. Bertozzi, V. Petruzzelli</i></p> <p>16:40 <b>We.D1.5</b> Reflective type multi-nanolayer electro-optical modulator for free space chip-to-chip optical interconnection: Electromagnetic modelling by the method of single expression <b>(Invited)</b>  <i>H. V. Baghdasaryan, T. M. Knyazyan, T. T. Hovhannisyán, G. R. Mardoyan, T. Baghdasaryan, E. Leitgeb, M. Marciniak</i></p>	<p><b>SDM I</b>  <b>Chair: Filipe M. Ferreira</b>  <b>(15:45-16:45 Wednesday, July 5)</b></p> <p>15:45 <b>We.D2.1</b> Petabits/s transmission over multimode fibers <b>(Invited)</b>  <i>W. Klaus, G. Rademacher, R. S. Luis, B. J. Puttnam, H. Furukawa</i></p> <p>16:05 <b>We.D2.2</b> Optimization of ultra-broadband optical wavelength conversion in nonlinear multi-modal silicon-on-insulator waveguides <b>(Invited)</b>  <i>T. Kernetzky, N. Hanik, Y. Jia, U. Höfler, R. Freund, C. Schubert, I. Sackey, G. Ronniger, L. Zimmermann</i></p> <p>16:25 <b>We.D2.3</b> Mode vector modulation: A review <b>(Invited)</b>  <i>I. Roudas, J. Kwapisz, E. Fink</i></p>	<p><b>RONEXT</b>  <b>Chair: Piero Castoldi</b>  <b>(15:30-17:10 Wednesday, July 5)</b></p> <p>15:30 <b>We.D3.1</b> Resilient control-plane design for T-SDN based optical transport networks <b>(Invited)</b>  <i>S. Sultana, R. Romero Reyes, K. T. Nguyen, T. Bauschert</i></p> <p>15:50 <b>We.D3.2</b> A flexible forecasting platform enabling zero touch networking and digital twinning <b>(Invited)</b>  <i>L. Valcarengli, P. Castoldi, A. Sgambelluri, E. Paolini, A. Pacini</i></p> <p>16:10 <b>We.D3.3</b> Fault monitoring in passive optical networks using machine learning techniques <b>(Invited)</b>  <i>K. Abdelli, C. Trotschug, H. Griesser, S. Pachnicke</i></p> <p>16:30 <b>We.D3.4</b> Proactive spectrum defragmentation leveraging spectrum occupancy state information <b>(Invited)</b>  <i>E. Etezadi, C. Natalino, R. Diaz, A. Lindgren, S. Melin, L. Wosinska, P. Monti, M. Furdek</i></p> <p>17:50 <b>We.D3.5</b> Enhancing inter-data centre link security with spectral polarisation shuffling and phase encoding <b>(Invited)</b>  <i>M. Pereira Nogueira, N. J. Badue, L. H. Bonari, I. Aldaya, M. L. F. Abbade</i></p>	<p><b>THzPho</b>  <b>Chair: Andreas Stöhr</b>  <b>(14:50-16:30 Wednesday, July 5)</b></p> <p>14:50 <b>We.D5.1</b> New opportunities open by advances in table-top, high-power, and broadband terahertz sources <b>(Invited)</b>  <i>S. Mansourzadeh, T. Vogel, C. Millon, M. Khalili, R. Löscher, C. J. Saraceno</i></p> <p>15:10 <b>We.D5.2</b> Conformal leaky-wave antennas for terahertz networks <b>(Invited)</b>  <i>H. Guerboukha, R. Shrestha, J. Neronha, Zhaoji Fang, D. M. Mittleman</i></p> <p>15:30 <b>We.D5.3</b> Plasmonic antennas for the reception of millimeter and THz waves <b>(Invited)</b>  <i>J. Smajic, H. Ibilii, T. Blatter, M. Baumann, B. Vukovic, J. Leuthold</i></p> <p>15:50 <b>We.D5.4</b> High output power broadband 1.55 μm waveguide-integrated terahertz MUTC-photodiodes <b>(Invited)</b>  <i>E. Abacıoğlu, M. Grzeslo, T. Neerfeld, J. L. Fernández Estévez, A. Stöhr</i></p> <p>16:10 <b>We.D5.5</b> New ICT devices enabled by organic electro-optic polymers <b>(Invited)</b>  <i>N. Wada, T. Kaji, T. Yamada, A. Otomo</i></p>	<p><b>MOF</b>  <b>Chair: Tigran Baghdasaryan</b>  <b>(16:30-17:30 Wednesday, July 5)</b></p> <p>16:30 <b>We.D6.1</b> Stable latency (hollow core) optical fibres <b>(Invited)</b>  <i>R. Slavik, Zitong Feng, F. Poletti, D. J. Richardson</i></p> <p>16:50 <b>We.D6.2</b> Quantum frequency conversion in photonic crystal fibre for universal wavelength interfaces <b>(Invited)</b>  <i>P. J. Mosley</i></p> <p>17:10 <b>We.D6.3</b> Hollow-core-fibre microreactors for photocatalysis <b>(Invited)</b>  <i>T. Lawson, A. S. Gentleman, E. Miele, M. H. Frosz, E. Reisner, T. G. Euser</i></p>
<p>19:00 – 22:30 Gala Dinner at Restaurant Pescarus (Seagull Restaurant) – King Mihai I Park</p>				
<p><b>Thursday, July 6</b></p>				
<p><b>Track 1 – Room 2.1</b></p>	<p><b>Track 2 – Room 2.2</b></p>	<p><b>Track 3 – Room 2.3</b></p>	<p><b>Track 4 – Room 3.1</b></p>	<p><b>Track 5 – Room 3.2</b></p>
<p><b>OWW IV</b>  <b>Chair: Ivan Djordjevic</b>  <b>(8:30-10:30 Thursday, July 6)</b></p> <p>8:30 <b>Th.A1.1</b> Rate splitting for 6G optical wireless networks  <i>K. D. Alazwary, A. A. Qidan, T. E. H. El-Gorashi, J. M. H. Elmirghani</i></p> <p>8:45 <b>Th.A1.2</b> Random linear network coding for non-orthogonal multiple access in multicast optical wireless systems  <i>A. A. Hassan, A. A. Qidan, T. El-Gorashi, J. M. H. Elmirghani</i></p> <p>9:00 <b>Th.A1.3</b> Multiuser beam steering OWC system based on NOMA  <i>Y. Zeng, S. H. Mohamed, A. Qidan, T. E. H. El-Gorashi, J. M. H. Elmirghani</i></p> <p>9:15 <b>Th.A1.4</b> Relay assisted multiuser OWC systems under human blockage  <i>Y. Zeng, S. H. Mohamed, A. Qidan, T. E. H. El-Gorashi, J. M. H. Elmirghani</i></p> <p>9:30 <b>Th.A1.5</b> Using control signals to obtain synchronization of transmitters in indoor VLC systems  <i>S. H. Younus</i></p> <p>9:45 <b>Th.A1.6</b> Mobility management for indoor VLC systems  <i>S. H. Younus</i></p> <p>10:00 <b>Th.A1.7</b> AI-driven resource allocation in optical wireless communication systems  <i>A. S. Elgamal, O. Z. Aletri, B. A. Yusuf, A. A. Qidan, T. El-Gorashi, J. M. H. Elmirghani</i></p> <p>10:15 <b>Th.A1.8</b> Resource allocation in IRS-aided optical wireless communication systems  <i>A. N. Hamad, A. A. Qidan, T. E. H. El-Gorashi, J. M. H. Elmirghani</i></p>	<p><b>SDM II</b>  <b>Chair: Filipe M. Ferreira</b>  <b>(8:30-9:30 Thursday, July 6)</b></p> <p>8:30 <b>Th.A2.1</b> Achieving information security in spatially multiplexed communication systems by harnessing disorder of multimode fibres <b>(Invited)</b>  <i>S. Rothe, K. -L. Besser, D. Krause, D. Pohle, R. Kuschmierz, N. Koukourakis, E. Jorswieck, J. W. Czarske</i></p> <p>8:50 <b>Th.A2.2</b> Scaling of the number of modes in mode division multiplexing systems <b>(Invited)</b>  <i>F. M. Ferreira, F. A. Barbosa, R. Yadav, Z. Htay</i></p> <p>9:10 <b>Th.A2.3</b> Single-pixel imaging: Concepts and application to imaging through scattering media <b>(Invited)</b>  <i>P. G. Vaz, B. Guerra, J. Cardoso</i></p>	<p><b>GOWN</b>  <b>Chair: Claudio Porzi</b>  <b>(8:30-9:25 Thursday, July 6)</b></p> <p>8:30 <b>Th.A3.1</b> Perspectives for co-packaged optics in radio access networks <b>(Invited)</b>  <i>A. Tartaglia, F. Cavaliere, M. Lostedt, A. Bigongiari, A. Palagi, U. Parkholm, A. Tavemark, Stefano Stracca, A. D'Errico, S. Lessard, M. Johansson</i></p> <p>8:50 <b>Th.A3.2</b> Reconfigurable MCF-SDM designs for 5/6G RAN and PON with optical feeding capability <b>(Invited)</b>  <i>F. M. A. Al-Zubaidi, R. Altuna, J. D. López-Cardona, D. S. Montero, C. Vázquez</i></p> <p>9:10 <b>Th.A3.3</b> Influence of frequency mapping on intermodulation distortion in an SOA-based optical fronthaul C-RAN architecture for 5G communications  <i>M. Kasmi, P. Morel, M. Telescu, V. Choqueuse, N. Tanguy, S. Azou</i></p> <p><b>GOC</b>  <b>Chair: Norbert Hanik</b>  <b>(9:40-10:30 Thursday, July 6)</b></p> <p>9:40 <b>Th.B3.1</b> Energy efficiency in next-generation optical networks <b>(Invited)</b>  <i>N. Sambo, C. Castro, N. Costa, P. Castoldi, A. Napoli</i></p> <p>10:00 <b>Th.B3.2</b> Energy efficient resource allocation for demand intensive applications in a VLC based fog architecture  <i>W. B. M. Fadlelmula, S. H. Mohamed, T. E. H. El-Gorashi, J. M. H. Elmirghani</i></p> <p>10:15 <b>Th.B3.3</b> Energy efficient laser-based optical wireless communication networks  <i>W. Z. Ncube, A. A. Qidan, T. El-Gorashi, J. M. H. Elmirghani</i></p>	<p><b>MOON</b>  <b>Chair: Vittorio Curri &amp; Carlos Castro</b>  <b>(8:30-10:20 Thursday, July 6)</b></p> <p>8:30 <b>Th.A4.1</b> Is the digital twin of the optical transport the enabler for multi-band open and disaggregated optical networks? <b>(Invited)</b>  <i>V. Curri</i></p> <p>9:00 <b>Th.A4.2</b> Accurate representation of signal power spectral density in the optical network emulation (ONE) engine <b>(Invited)</b>  <i>A. Gomathinayakam Latha, M. R. Rahim, Tianliang Zhang, Rongqing Hui, A Fumagalli</i></p> <p>9:20 <b>Th.A4.3</b> Autonomous equalization of independent open ROADMs via NETCONF protocol  <i>R. Ambrosone, R. D'Ingillo, G. Borracchini, S. Straullu, A. D'Amico, E. Virgillito, A. Giorgetti, V. Curri</i></p> <p>9:35 <b>Th.A4.4</b> A comprehensive network performance analysis of multi-band photonic integrated WSS for 400G and 800G transmission  <i>M. U. Masood, L. Tunesi, I. Khan, B. Correia, E. Ghillino, P. Bardella, A. Carena, V. Curri</i></p> <p>9:50 <b>Th.A4.5</b> Influence of the ROADM architecture on the cost-per-bit in C+L+S multi-band optical networks  <i>J. F. Ó. Ramos, L. Cancela, J. Rebola</i></p> <p>10:05 <b>Th.A4.6</b> Impact of network physical topology on planning multiband optical networks aware of physical layer impairments  <i>M. Vaz, L. Cancela, J. Rebola</i></p>	<p><b>NAON</b>  <b>Chair: Liam O'Faolain</b>  <b>(8:30-10:10 Thursday, July 6)</b></p> <p>8:30 <b>Th.A5.1</b> Next-generation InP technology for high-demand communication networks and emerging applications <b>(Invited)</b>  <i>Y. Wang, S. Latkowski, E. Panina, J. van der Tol, K. Williams, Y. Jiao</i></p> <p>8:50 <b>Th.A5.2</b> Experimental study of quantum random number generation using polarization switching in gain-switched VCSELs <b>(Invited)</b>  <i>I. Rivero, M. Valle-Miñón, A. Quirce, A. Valle</i></p> <p>9:10 <b>Th.A5.3</b> Investigation of material properties for use in UV metasurfaces <b>(Invited)</b>  <i>L. Yu. Beliaev, M. H. Jakobsen, E. Shkondin, P. Voss Larsen, A. Lavrinenko, R. Malureanu</i></p> <p>9:30 <b>Th.A5.4</b> The Poynting vector in light-emitting multilayer micro/nanostructures: Wavelength-scale analysis by the method of single expression <b>(Invited)</b>  <i>H. V. Baghdasaryan, T. M. Knyazyan, T. T. Hovhannisyán, M. Marciniak, T. Baghdasaryan</i></p> <p>9:50 <b>Th.A5.5</b> Low-energy electronic states in tubular wires <b>(Invited)</b>  <i>A. Sitek, A. Manolescu</i></p>
<p><b>Closing Ceremony (11:00-11:30 Thursday, July 6)</b></p>				
<p><b>Lunch</b> 12:00</p>				