

ICTON 2007 Technical Programme

Sunday, July 1

17:30 **Historical Tour to the Roman Forum** (for more information see www.iscom.istsupcti.it/documenti/evidenza/icton2007_social_events.pdf)

Monday, July 2

8:00 **Registration at Istituto Superiore Antincendi**

9:15

Opening Ceremony

Chairs: Marian Marciniak, Giorgio Maria Tosi Beleffi

Welcome address by:

- Director of Istituto Superiore Antincendi
- Minister Paolo Gentiloni, Ministry of Communications, Italy
- Minister Jerzy Polaczek, Ministry of Transport, Poland
- Minister Giuliano Amato, Ministry of Interior, Italy

SESSION Mo.A (9:35 – 10:35 Aula Magna)

Plenary Session

Chair: Hans-Georg Unger

Mo.A.1 Photon funneling from ultrasmall photonic crystal lasers near communications wavelength (*Invited*)

9:35 *Y-H. Lee, I-K. Hwang, S-H. Kim*

Mo.A.2 Research in optical transport networks: the e-Photon/ONE+ experience (*Invited*)

9:55 *F. Callegati, L. Wosinska, M. Tornatore, F. Cugini*

Mo.A.3 Challenges in stable, high-capacity optical communication networks (*Invited*)

10:15 *A.E. Willner*

10:35 – 11:00

Coffee break

SESSION Mo.B1 (11:00–13:00 Aula Magna)

ICTON I (Systems I)

Chair: Krzysztof Abramski

Mo.B1.1 Recent progress and fundamental limitations of optical MLSE receivers (*Invited*)
11:00 *P. Poggiolini, G. Bosco, M. Visintin, P. Bayvel, R. Killely, S. Savory, Y. Benlachtar, J. Prat, M. Omella*

Mo.B1.2 Orthogonal frequency division multiplexing (OFDM) and other advanced options to achieve 100Gb/s Ethernet transmission (*Invited*)
11:20 *W. Rosenkranz, J. Leibrich, M. Serbay, A. Ali*

Mo.B1.3 Modulation formats for upgrading MANs to 40 Gb/s per channel (*Invited*)
11:40 *A.V.T. Cartaxo, D. Fonseca, P.M.P. Monteiro*

Mo.B1.4 Optical channel impairments mitigation on 40 Gb/s systems resorting to post-detection adjustable electrical compensation (*Invited*)
12:00

SESSION Mo.B2 (11:00 – 13:20 Room 22)

ESPC I

Chair: Ramon Vilaseca

Mo.B2.1 LEOS Distinguished Lecture on: Photonic Crystal Devices (*Invited*)
11:00 *J. O'Brien*

Mo.B2.2 High-Q cavities in photonic crystal slab heterostructures formed by variation in the refractive index (*Invited*)
11:20 *S. Tomljenovic-Hanic, C.C Martijn, C.M. de Sterke, M.J. Steel*

Mo.B2.3 Pulsed and continuous-wave operation of photonic band-edge lasers near 1.55 μm on silicon wafer (*Invited*)
11:40 *F. Raineri, G. Vecchi, T. Karle, A. Giacomotti, A. Levenson, R. Raj*

Mo.B2.4 Enhanced light emission in active silicon-on-insulator photonic crystal slabs and slot waveguides (*Invited*)
12:00

SESSION Mo.B3 (11:00 – 12:40 Room 21)

WAOR I

Chair: Ioannis Tomkos

Mo.B3.1 Integrating GMPLS in the OBS networks control plane (*Invited*)
11:00 *P. Pedroso, J. Solé-Pareta, D. Careglio, M. Klinkowski*

Mo.B3.2 Cost-effective heuristics for planning GMPLS transport networks with conversion and regeneration capabilities (*Invited*)
11:20 *N. Naas, H.T. Mouftah*

Mo.B3.3 A framework of label preference in GMPLS controlled optical networks (*Invited*)
11:40 *P. Castoldi, N. Andriolli, I. Cerutti, N. Sambo, L. Valcarenghi, A. Giorgetti, F. Cugini, S. Ruepp, J. Buron*

Mo.B3.4 The CARISMA ASON/GMPLS network: overview and open issues (*Invited*)
12:00 *S. Spadaro, J. Perelló, E. Escalona,*

<p><i>P.M.P. Monteiro, M.A.M. Madureira, D. Fonseca, R.L. Aguiar, A.V.T. Cartaxo, F. Sousa, M. Violas</i></p> <p>Mo.B1.5 Phase modulation techniques for on-off keying transmission (<i>Invited</i>) 12:20 <i>M. Forzati</i></p> <p>Mo.B1.6 Quantum communication in optical networks: an overview and selected recent results (<i>Invited</i>) 12:40 <i>S. Sauge, M. Swillo, S. Albert-Seifried, G.B. Xavier, J. Waldebäck, M. Tengner, D. Ljunggren, Q. Wang, A. Karlsson</i></p>	<p><i>D. Gerace, L.C. Andreani, M. Belotti, M. Galli, M. Patrini, A. Politi, M. Liscidini, A. Canino, A. Irrera, R. Lo Savio, M. Miritello, F. Priolo, Y. Chen</i></p> <p>Mo.B2.5 High numerical aperture real and Fourier space investigation of planar photonic devices operating below the light cone (<i>Invited</i>) 12:20 <i>N. Le Thomas, R. Houdré, M.V. Kotlyar, L. O'Faolain, T.F. Krauss, L.H. Frandsen, J. Fage-Pedersen, A.V. Lavrinenko, P.I. Borel</i></p> <p>Mo.B2.6 Recent progress in research on photonic crystal fiber couplers (<i>Invited</i>) 12:40 <i>Y. Sasaki, H. Yokota</i></p> <p>Mo.D2.1 Theoretical vs. experimental results of 1.55 μm VCSELs (<i>Invited</i>) 13:00 <i>P. Debernardi, B. Kögel, P. Meissner, G. Böhm, M-C. Amann</i></p>	<p><i>L. Velasco, F. Agraz, J. Comellas, G. Junyent</i></p> <p>Mo.B3.5 Optimization of wavelength allocation in GMPLS-based optical packet-switched networks (<i>Invited</i>) 12:20 <i>F. Callegati, W. Cerroni, D. Vigo</i></p>	
<p>13:00 – 14:30 Lunch break 13:20 – 14:50 Lunch break 12:40 – 14:10 Lunch break</p>			
<p>SESSION Mo.C1 (14:30–16:30 Aula Magna)</p> <p style="text-align: center;">ICTON II (Systems II) <i>Chair: Norbert Hanik</i></p> <p>Mo.C1.1 Field trial to upgrade an existing 10 Gbit/s DWDM link with 40 Gbit/s RZ-DQPSK channels (<i>Invited</i>) 14:30 <i>A. Ehrhardt, D. Breuer, D. Fritzsche, S. Vorbeck, M. Schneiders, W. Weiershausen, R. Leppla, C. Fürst, J.P. Elbers, M. Camera, H. Wernz, H. Griesser, S. Herbst, F. Cavaliere, J. Wendler, M. Schrödel, T. Wuth, C. Fludger, T. Duthel, B. Milivojevic, C. Schullien</i></p> <p>Mo.C1.2 40G and higher what is waiting for us ahead? (<i>Invited</i>) 14:50 <i>A. Girard, D. Kallgren, M. Söderberg</i></p> <p>Mo.C1.3 High speed technologies for MMF systems (<i>Invited</i>) 15:10 <i>I.H. White, J.D. Ingham, R.V. Penty</i></p> <p>Mo.C1.4 Optical network for high-quality broadband services (<i>Invited</i>) 15:30 <i>M. Suzuki, Y. Horiuchi, M. Hayashi, T. Otani</i></p> <p>Mo.C1.5 Utilizing an active fiber optic communication network for accurate time distribution (<i>Invited</i>) 15:50 <i>P.O. Hedekvist, R. Emardson, S-Ch. Ebenhag, K. Jaldehag</i></p> <p>Mo.C1.6 Recent developments in polymer optical fiber</p>	<p>SESSION Mo.C2 (14:50 – 16:50 Room 22)</p> <p style="text-align: center;">NAON I (Bistability) <i>Chair: Judy Rorison</i></p> <p>Mo.C2.1 Optical buffer memory with a shift register function using polarization bistable VCSELs (<i>Invited</i>) 14:50 <i>H. Kawaguchi</i></p> <p>Mo.C2.2 Bistability and all-optical switching in semiconductor ring lasers (<i>Invited</i>) 15:10 <i>A. Scirè, A. Pérez, T. Pérez, G. Van der Sande, P. Colet, C.R. Mirasso, S. Balle</i></p> <p>Mo.C2.3 Optical signal processing promoted by optical data form conversion (<i>Invited</i>) 15:30 <i>T. Konishi</i></p> <p>Mo.C2.4 Optically addressable bistable memory based on semiconductor ring lasers: experimental results (<i>Invited</i>) 15:50 <i>G. Giuliani, F. Bragheri, M. Sorel, S. Furst, A. Scirè, J. Danckaert, S. Yu</i></p> <p>Mo.C2.5 Optical bistability and nonlinear switching in 1550 nm VCSELs (<i>Invited</i>) 16:10 <i>A. Hurtado, M.J. Adams, I.D. Henning</i></p> <p>Mo.C2.6 PC-SMZ-based all-optical flip-flop switch:</p>	<p>SESSION Mo.C3 (14:10 – 15:30 Room 21)</p> <p style="text-align: center;">WAOR II <i>Chair: Mirek Klinkowski</i></p> <p>Mo.C3.1 EU Integrated Project PHOSPHORUS: Grid-GMPLS control plane for the support of grid network services (<i>Invited</i>) 14:10 <i>G. Markidis, A. Tzanakaki, N. Ciulli, G. Carozzo, D. Simeonidou, R. Nejabati, G. Zervas</i></p> <p>Mo.C3.2 Applying prediction concepts to routing on semi-transparent optical transport networks (<i>Invited</i>) 14:30 <i>E. Marin, S. Sanchez, X. Masip, J. Solé, G. Maier, W. Erangoli, S. Santoni, M. Quagliotti</i></p> <p>Mo.C3.3 Resource blocking and usage in optical networks (<i>Invited</i>) 14:50 <i>H. Waldman, D.R. Campelo</i></p> <p>Mo.C3.4 Ultra-high speed optical packet switching system and related technologies (<i>Invited</i>) 15:10 <i>N. Wada, H. Furukawa, T. Miyazaki</i></p>	

16:10	(POF) transceivers <i>(Invited)</i> R. Gindera, I. Möllers, M. Bülters, D. Kalinowski, D. Jäger	16:30	PC-FF <i>(Invited)</i> K. Asakawa		
16:30 – 17:00 Coffee break		16:50 – 17:20 Coffee break		15:30 – 16:00 Coffee break	
SESSION Mo.D1 (17:00–19:00 Aula Magna)		SESSION Mo.D2 (17:20 – 19:00 Room 22)		SESSION Mo.D3 (16:00 – 18:05 Room 21)	
GRAAL <i>Chair: Wojciech Kabaciński</i>		NAON II (Lasers I) <i>Chair: Emilia Giorgetti</i>		Special Session: MPM I <i>Chair: Svetlana Boriskina</i>	
Mo.D1.1 17:00	Optimal on-line colorings for minimizing the number of ADMs in optical networks <i>(Invited)</i> M. Shalom, P.W.H. Wong, S. Zaks	Mo.D2.2 17:20	Polarization synchronization properties of unidirectionally coupled VCSELs <i>(Invited)</i> M. Sciamanna, I. Gatara, A. Locquet, K. Panajotov	Mo.D3.1 16:00	Theory and applications of 2D microcavity lasers <i>(Invited)</i> T. Harayama, T. Fukushima
Mo.D1.2 17:20	Valid inequalities for a shortest-path routing optimization problem <i>(Invited)</i> A. Tomaszewski, M. Pióro, M. Dzida, M. Mycek, M. Zagożdżon	Mo.D2.3 17:40	Optimal designs of telecommunication oriented photonic-crystal VCSELs <i>(Invited)</i> T. Czystanowski, R.P. Sarzala, M. Dems, H. Thienpont, K. Panajotov	Mo.D3.2 16:20	Theory of the spatial structure of non-linear modes in novel and complex laser cavities <i>(Invited)</i> A.D. Stone, H.E. Türeci, L. Ge, S. Rotter
Mo.D1.3 17:40	Fairness issues of AMLTE: adaptive multi-layer traffic engineering with grooming <i>(Invited)</i> T. Cinkler, P. Hegyi, G. Geleji, J. Szigeti	Mo.D2.4 18:00	Semiconductor optical amplifiers for FTTx <i>(Invited)</i> L. Spiekman, D. Piehler, P. Iannone, K. Reichmann, H-H. Lee	Mo.D3.3 16:40	Fabrication, characterization, and applications of crystalline whispering gallery mode resonators <i>(Invited)</i> A.B. Matsko, A.A. Savchenkov, D. Strelakov, V.S. Ilchenko, N. Yu, L. Maleki
Mo.D1.4 18:00	Control algorithm for multi-plane photonic banyan-type switching fabric with and without first order crosstalk <i>(Invited)</i> G. Danilewicz, W. Kabaciński, M. Michalski, M. Żal	Mo.D2.5 18:20	Single-photonics at telecom wavelengths using superconducting nanostructured detectors <i>(Invited)</i> A. Fiore, F. Marsili, D. Bitauld, C. Zinoni, A. Gaggero, R. Leoni, F. Mattioli	Mo.D3.4 17:00	Nonlinear effects due to thermo-optical instability in microsphere resonators C. Schmidt, O. Egorov, A. Chipouline, T. Pertsch, F. Lederer, A. Tünnermann, L. Deych
Mo.D1.5 18:20	Operational cost reduction in WDM networks using lighttours <i>(Invited)</i> J.L. Marzo, L. Caro, F. Solano, J.C. de Oliveira, R. Fabregat	Mo.D2.6 18:40	QDot and GalnNAs/GaAs broadband semiconductor optical amplifiers for simultaneous multiwavelength amplification <i>(Invited)</i> J.M. Rorison, J. Pozo, N. Vogiatzis, Y.N. Qiu, P. Tuomisto, J. Konttinen, M. Saarinen, C. Peng, J. Viheriälä, T. Leinonen, M. Pessa	Mo.D3.5 17:15	In situ tuning of optical modes in single semiconductor microcavities by laser heating A. Rastelli, S. Kiravittaya, M. Benyoucef, Y. Mei, O.G. Schmidt
Mo.D1.6 18:40	A randomized cost smoothing approach for optical network design <i>(Invited)</i> A. Jüttner, T. Cinkler, B. Dezso			Mo.D3.6 17:30	Tunable high-Q directional random laser from a planar random microcavity Q. Song, S. Xiao, X. Zhou, L. Liu, L. Xu, Y. Wu, Z. Wang
				Mo.D3.7 17:45	Lasing in open microcavities with active regions as a linear electromagnetic eigenproblem A.I. Nosich, E.I. Smotrova, P. Sewell, T.M. Benson

POSTER SESSION Mo.P (during breaks between sessions, Building F Level -1)

- Mo.P.1** DWDM transparent FSO system for in/outdoor applications at high bit rates
V. Sacchieri, V. De Sanctis, N. Corsi, F. Curti, M. Guglielmucci, G. Tosi Beleffi, D. Forin, G. Cincotti
- Mo.P.2** General purpose combined optical-wireless ZigBee sensor networks
R. Klinda, V. Bartoss, M. Csörnyei, T. Bánky, T. Berceli
- Mo.P.3** WDM passive optical network with simultaneous wireline/wireless downlink transmission and wavelength reuse for uplink connection
H-C. Kwon, Y-Y. Won, D-W. Lee, S-K. Han

- Mo.P.4** Generation of ultrawideband pulses using a distributed fiber-link system
W-P. Lin, H.H. Chien
- Mo.P.5** Fast Ethernet restoration based on alternative wavelength paths
F. Matera, L. Rea, M. Venezia, L. Capanna, G. Pierri, G. Del Prete
- Mo.P.6** Demonstration of an application-aware resilience mechanism for dynamic heterogeneous networks
C. Okonkwo, R. Martin, M.P. Ferrera, K. Guild, M. O'Mahony, J. Everett
- Mo.P.7** Availability of connections in Ethernet over DWDM core networks
D. Laidevant, F. Rambach, M. Hoffmann
- Mo.P.8** Interleaved polling algorithm with service level agreement (SLA) to improve QoS in Ethernet PONs
N. Merayo, R.J. Durán, P. Fernández, I. de Miguel, J.C. Aguado, R.M. Lorenzo, E.J. Abri
- Mo.P.9** Quality of service investigation on high definition IPTV services in a multivendor optical network with ADSL access
S. Pompei, L. Rea, C. Zema, F. Matera, G. Pierri, E. Binnella, R. Iacchetti
- Mo.P.10** Methods of building ethernet-type passive optical networks
G. Budzyń, G. Lis, E. Bereś-Pawlik
- Mo.P.11** Comparison of bandwidth and bit error rate of passive multimode networks
G. Lis, G. Budzyń, T. Duchiewicz, E. Bereś-Pawlik
- Mo.P.12** Optical interconnect for next-generation supercomputers based on wavelength division multiplexed clockwork routing
E. Bravi, D. Cotter
- Mo.P.13** Split-step-fourier-method in modeling wavelength-division-multiplexed links
M. Jaworski, M. Chochót
- Mo.P.14** Accurate PMD measurements using OSA and polarisation scrambling
M. Jaworski, M. Marciniak
- Mo.P.15** Noise penalties modeling for the performance evaluation of all-optical networks
H.A. Pereira, D.A.R. Chaves, C.J.A. Bastos-Filho, J.F. Martins-Filho
- Mo.P.16** Study of the electronic dispersion compensation for 2.5 and 10 Gb/s transient and adiabatic chirped directly modulated lasers
I. Papagiannakis, C. Xia, D. Klonidis, W. Rosenkranz, A.N. Birbas, I. Tomkos
- Mo.P.17** Analytical modeling of the cross-phase modulation-induced degradation in mixed DPSK and ASK transmission systems
R. Luís, B. Clouet, A. Teixeira, P. Monteiro
- Mo.P.18** Impact of mode-partition noise in the performance of 10 Gbit/s Ethernet passive optical networks
S. Pato, P. Monteiro, H. Silva
- Mo.P.19** Comparison of an unconventional all-optical chromatic dispersion compensation techniques in nothing in line scenarios with emphasis to tunability
J. Vojtech, M. Karasek, J. Radil
- Mo.P.20** Evaluation of the budget extension of a GPON by EDFA amplification
N. Genay, T. Soret, P. Chanclou, B. Landousies, L. Guillo, F. Saliou
- Mo.P.21** Bandwidth re-distribution techniques for extended EPON based multi-wavelength networks
R. Roy, G. Manhoudt, W. van Etten
- Mo.P.22** Effect of the multiplexer position in Rayleigh-limited WDM-PONs with amplified-reflective ONU
C. Arellano, V. Polo, J. Prat
- Mo.P.23** Data mirroring for metro WDM storage area networks
B. Prangono, R. Mehmood, J.M.H. Elmirghani
- Mo.P.24** Analytical model for performance evaluation of a novel optical packet/burst switch
K. Aziz, S. Sarwar, S. Aleksic
- Mo.P.25** Multiobjective genetic algorithm to design cost-efficient wavelength-routed optical networks
R.J. Durán, I. de Miguel, N. Merayo, P. Fernández, J.C. Aguado, R.M. Lorenzo, E.J. Abril
- Mo.P.27** A comparative study of single-layer and multi-layer traffic engineering approaches on transparent optical networks
N. Sengezer, B. Puype, E. Karasan, M. Pickavet
- Mo.P.28** Calculating blocking probabilities in single-hop WDM traffic groomed optical networks
J.S. Vardakas, V.G. Vassilakis, M.D. Logothetis

Mo.P.29 Considerations on in-band and out-of-band signalling constraints in OBS networks
A. Pantaleo, M. Tornatore, A. Pattavina, C. Raffaelli, F. Callegati

Mo.P.30 Method to ensure a feasible wavelength assignment within the routing-only problem for transparent WDM networks
C. Meusbürger, D.A. Schupke

20:00

Welcome Cocktail at Istituto Superiore Antincendi

Tuesday, July 3

SESSION Tu.A1 (8:30–10:30 Aula Magna)

ICTON III (Systems III)

Chair: Carmen Mas Machuca

- Tu.A1.1** 8:30 Dependence of XPM degradation on the dispersion map for 10 Gbit/s WDM links over standard-fibre employing duobinary format
T. Alves, N. Costa, A. Cartaxo
- Tu.A1.2** 8:45 40 Gb/s optical single sideband DWDM transmission system using polar return-to-zero signalling format
A. Ferreira, T. Silveira, P. Monteiro, R. Ribeiro
- Tu.A1.3** 9:00 I Channel crosstalk in ultra-dense WDM PON using time-switched phase diversity optical homodyne reception
J.M. Fàbrega, J. Prat
- Tu.A1.4** 9:15 Advanced modulation formats in optical code division multiple access networks
G. Manzacca, F. Benedetto, V. Sacchieri, G. Giunta, G. Cincotti
- Tu.A1.5** 9:30 Reduction of multiple access interference in OCDMA systems using a semiconductor based TPA device
K.J. Dexter, P.J. Maguire, L.P. Barry
- Tu.A1.6** 9:45 Integrated packet-level all-optical clock recovery scheme based on a resonator and a quantum dot optical amplifier
X Song, I. Koukounidis, E.A. Avrutin
- Tu.A1.7** 10:00 Investigation of multi-wavelength regeneration employing quantum-dot semiconductor optical amplifiers beyond 40Gb/s
M. Spyropoulou, S. Sygletos, I. Tomkos
- Tu.A1.8** 10:15 Cross-gain modulation-based 2R regenerator using quantum-dot semiconductor optical amplifiers at 160 Gbit/s
J.F. Pina, H.J.A. da Silva, P.N. Monteiro, J. Wang, W. Freude, J. Leuthold

SESSION Tu.A2 (8:30 – 10:25 Room 22)

ESPC II

Chair: Katia Gallo

- Tu.A2.1** 8:30 Recent advances in photonic crystals and metamaterials (*Invited*)
N.P. Johnson, A.Z. Khokhar, B. Lahiri, S. McMeekin, R.M. De La Rue, C. Debus, P. Haring Bolivar
- Tu.A2.2** 8:50 Metamaterials for microwave photonics (*Invited*)
R. Brazis, V. Kazakevičius, R. Narkowicz
- Tu.A2.3** 9:10 Left-handed materials in microwave and infrared frequencies (*Invited*)
M. Kafesaki, E.N. Economou, N. Katsarakis, I. Tsiapa, T. Gundogdu, C.M. Soukoulis, T. Koschny
- Tu.A2.4** 9:30 Band structure and coupled surface plasmons in one dimensional, frequency dependent photonic crystals (*Invited*)
M. Bergmair, K. Hingerl
- Tu.C2.2** 9:50 Nonlinear NanoOptics (*Invited*)
J. Martorell, X. Vidal, M. Maymó, S. Di Finizio, J.L. Domínguez-Juárez, M. Botey, G. Kozyreff, P. Kappe
- Tu.A2.6** 10:10 Zener tunnelling in periodic two-dimensional photonic lattices with three-fold symmetry
A.S. Desyatnikov, Yu.S. Kivshar, V.S. Shchesnovich, S.B. Cavalcanti, J.M. Hickmann

SESSION Tu.A3 (8:30 – 10:30 Room 21)

Special Session: MPM II

Chair: Alexander Nosich

- Tu.A3.1** 8:30 Optical transport phenomena in coupled spherical cavities (*Invited*)
V.N. Astratov, S.P. Ashili, S. Yang
- Tu.A3.2** 8:50 Bound whispering gallery modes in circular arrays of dielectric spherical particles (*Invited*)
A.L. Burin, G.S. Blaustein, O.M. Samoylova
- Tu.A3.3** 9:10 Enhanced frequency shift in optical slow-wave structures (*Invited*)
F. Morichetti, C. Ferrari, A. Melloni
- Tu.A3.4** 9:30 Coupling of the fundamental whispering gallery mode in bi-spheres
L.I. Deych, C. Schmidt, A. Chipouline, T. Pertsch, A. Tünnermann
- Tu.A3.5** 9:45 Mode splitting induced by radiation pressure in a spherical microcavity
M. Gerlach, Y.P. Rakovich, J.F. Donegan
- Tu.A3.6** 10:00 Investigation of vertical radiation loss for whispering-gallery modes in 3-D microresonators by FDTD simulation
Y-D. Yang, Y-Z. Huang, Q. Chen
- Tu.A3.7** 10:15 What determines the direction of far-field emission in chaotic microcavities?
S.W. Kim, J-B. Shim, S-B. Lee, J. Yang, S. Moon, J-H. Lee, K. An, H-W. Lee

SESSION Tu.A4 (8:30 – 10:50 Room 20)

Special Session: Industrial I

Chair: Uri Mahlab

- Tu.A4.1** 8:30 University-industry synergies in photonics and optoelectronics: the case of Brescia (*Invited*)
F. Docchio, G. Sansoni
- Tu.A4.2** 8:50 Electronic signal processing to improve system performance of optical interconnects (*Invited*)
M. Glick, P. Watts, R. Waegemans, P. Bayvel, R.I. Killey
- Tu.A4.3** 9:10 Dispersion compensation in non-linear self phase modulation (SPM) and cross phase modulation (XPM) induced optical channel using vectorial MLSE equalizer (*Invited*)
O. Rozen, T. Cohen, G. Kats, D. Sadot, A. Levy, U. Mahlab
- Tu.A4.4** 9:30 Optoelectronic components for WDM-PON (*Invited*)
A. Borghesani
- Tu.A4.5** 9:50 Analysis and identification of fast transients in optical networks (*Invited*)
Y. Ben-Ezra, U. Mahlab, B.I. Lembrikov, V. Vulfin
- Tu.A4.6** 10:10 Next generation optical fibers: challenges and opportunities (*Invited*)
C. Mazzali
- Tu.A4.7** 10:30 Solutions for budget increase for the next generation optical access network (*Invited*)
N. Genay, P. Chanclou, F. Saliou, Q. Liu, T. Soret, L. Guillo

10:30 – 11:00

Coffee break

10:25 – 10:55

Coffee break

10:30 – 11:00

Coffee break

10:50 – 11:20

Coffee break

Official addresses by:

– Minister Luigi Nicolais, Ministry of Innovation in the Public Administration, Italy

– Minister Fabio Mussi, Ministry of University and Research, Italy

are scheduled at Aula Magna about 11:30

<p>SESSION Tu.B1 (11:00–13:00 Aula Magna)</p> <p>ICTON IV (Access) <i>Chair: Yutaka Sasaki</i></p> <p>Tu.B1.1 11:00 OCDMA over WDM transmission (<i>Invited</i>) <i>X. Wang, N. Wada, T. Hamanaka, T. Miyazaki, G. Cincotti, K. Kitayama</i></p> <p>Tu.B1.2 11:20 Interferometric noise characterisation of a 2-D time spreading wavelength hopping OCDMA networks using FBG encoding/decoding (<i>Invited</i>) <i>C. Michie, R. Atkinson, I. Andonovic, P. Barry, I. Glesk, P. Prucnal, K. Sasaki, G. Gupta</i></p> <p>Tu.B1.3 11:40 2-D wavelength-time optical CDMA system – experiment and simulation (<i>Invited</i>) <i>F. Uherek, J. Chovan</i></p> <p>Tu.B1.4 12:00 Advanced technologies for service-integrated optical in-building networks (<i>Invited</i>) <i>A.M.J. Koonen, M. Garcia Larrode, J. Yang, P.J. Urban, H. Yang, A. Ng'oma, G.J. Rijckenberg, H.P.A. van den Boom</i></p> <p>Tu.B1.5 12:20 System and circuit design for time-wavelength optical CDMA networks (<i>Invited</i>) <i>M.N. Pimenta, I. Darwazeh</i></p> <p>Tu.B1.6 12:20 Performance comparison of high speed LAN optical CDMA systems at different data rates (<i>Invited</i>) <i>N. Gupta, D.M. Saxena</i></p>	<p>SESSION Tu.B2 (10:55 – 12:35 Room 22)</p> <p>ESPC III (Modelling I) <i>Chair: Crina Cojocaru</i></p> <p>Tu.B2.1 10:55 Analysis of complex photonic structures (<i>Invited</i>) <i>R. Pregla</i></p> <p>Tu.B2.3 11:15 Introducing oblique coordinates in numerical methods, applied to the computation of band structures (<i>Invited</i>) <i>S.F. Helfert</i></p> <p>Tu.B2.4 11:35 Analytical approach to Bragg fiber design: scalar approximation (<i>Invited</i>) <i>A. Popov, D. Prokopovich, A. Vinogradov</i></p> <p>Tu.B2.5 11:55 Photonic band-gap structures with periodicity interruptions: theory and applications (<i>Invited</i>) <i>L. Pajewski, G. Schettini</i></p> <p>We.A2.5 12:15 Coupling phenomena in 2D photonic crystal structures (<i>Invited</i>) <i>M. Svaluto-Moreolo, G. Manzacca, G. Cincotti</i></p>	<p>SESSION Tu.B3 (11:00 – 12:45 Room 21)</p> <p>WAOR III <i>Chair: Davide Careglio</i></p> <p>Tu.B3.1 11:00 Multi-layer analysis to quantify the impact of optical burst reordering on TCP performance <i>S. Gunreben</i></p> <p>Tu.B3.2 11:15 Adaptive burst assembly mechanism for OBS networks using control channel availability <i>J.N.T. Sanghavi, H. Elbiaze, M.F. Zhani</i></p> <p>Tu.B3.3 11:30 Assessment of TCP performance in OBS networks with load dependent contention <i>J.P. Gelpke, M. Schlosser, E. Patzak, H. Buchta</i></p> <p>Tu.B3.4 11:45 Evaluation and comparison of signaling reservation protocols for grid over OBS networks employing active routers <i>M. Guerreiro, N.S. Correia, M.C.R. Medeiros</i></p> <p>Tu.B3.5 12:00 Modelling of control plane in OBS networks <i>M. Klinkowski, D. Careglio, J. Solé-Pareta</i></p> <p>Tu.B3.6 12:15 On fully exploiting the space domain for contention resolution/avoidance in optical burst-switched networks <i>J. Pedro, J. Castro, P. Monteiro, J. Pires</i></p> <p>Tu.B3.7 12:30 Performance evaluation of a bufferless packet-switched node <i>I. Szcześniak, T. Czachórski</i></p>	<p>SESSION Tu.B4 (11:20 – 13:40 Room 20)</p> <p>Special Session: Industrial II <i>Chair: Karin Ennser</i></p> <p>Tu.B4.1 11:20 Multimedia as a driving force for new optical infrastructure (<i>Invited</i>) <i>Z. Kądzieski</i></p> <p>Tu.B4.2 11:40 Next generation optical networks and new services: an operator's point of view (<i>Invited</i>) <i>A. Ehrhardt</i></p> <p>Tu.B4.3 12:00 Dynamically reconfigurable transparent optical networking based on cross-layer optimization (<i>Invited</i>) <i>I. Tomkos</i></p> <p>Tu.B4.4 12:20 Applications of all-optical signal processing in modern optical communications (<i>Invited</i>) <i>Y. Ben-Ezra, U. Mahlab, M. Haridim, B.I. Lembrek</i></p> <p>Tu.B4.5 12:40 Coherent detection: a key enabler for next-generation optical transmission systems? (<i>Invited</i>) <i>S. Bigo</i></p> <p>Tu.B4.6 13:00 Paving the optical future with affordable lightning-fast links (<i>Invited</i>) <i>S. Abrate, R. Gaudino</i></p> <p>Tu.B4.7 13:20 Evolving optical networks to reduce total cost of ownership (<i>Invited</i>) <i>D. Payne, R. Davey, A. Lord</i></p>
<p>13:00 – 14:30 Lunch break</p>	<p>12:35 – 14:05 Lunch break</p>	<p>12:45 – 14:15 Lunch break</p>	<p>13:40 Lunch</p>
<p>SESSION Tu.C1 (14:30–16:25 Aula Magna)</p> <p>ICTON V (Nonlinear Phenomena) <i>Chair: Ivan Kityk</i></p> <p>Tu.C1.1 14:30 Performance studies of multi-wavelength all-optical 2R regeneration subsystems based on highly non-linear fibers (<i>Invited</i>) <i>I. Tomkos, C. Kouloumentas, S. Tsolakidis</i></p> <p>Tu.C1.2 14:50 Raman amplification using incoherent pump sources (<i>Invited</i>) <i>P.S. André, A.N. Pinto, A.L.J. Teixeira, B. Neto, S. Junior, D. Sperti, F. da Rocha, M. Bernardo, M. Fujiwara, A. Rocha, M. Facão</i></p>	<p>SESSION Tu.C2 (14:05 – 15:45 Room 22)</p> <p>NAON III <i>Chair: Marc Sciamanna</i></p> <p>Tu.C2.1 14:05 Silicon photonic arrayed waveguide devices and sub-wavelength structures (<i>Invited</i>) <i>P. Cheben, A. Delâge, A. Densmore, M. Florjanczyk, S. Janz, B. Lamontagne, J. Lapointe, E. Post, I. Powell, J. Schmid, P. Waldron, D.X. Xu</i></p> <p>Tu.A2.5 14:25 Nanostructured metal-dielectric interfaces for photonic applications (<i>Invited</i>) <i>E. Giorgetti</i></p>	<p>SESSION Tu.C3 (14:15 – 16:15 Room 21)</p> <p>RONEXT I <i>Chair: Andrea Fumagalli</i></p> <p>Tu.C3.1 14:20 Reliability performance of passive optical networks (<i>Invited</i>) <i>L. Wosinska, J.J. Chen</i></p> <p>Tu.C3.2 14:40 Impact of protection on the cost of Ethernet services on different optical network platforms (<i>Invited</i>) <i>C. Mas Machuca, O. Moe</i></p>	

<p>Tu.C1.3 15:10 Performance evaluation of an all-optical wavelength converter TDM demux based on induced modulation on an auxiliary carrier by means of super-continuum generation (Invited) <i>D.M. Forin, F. Curti, G.M. Tosi Beleffi, S. Taccheo, K. Ennser, M. Karasek, A.L.J. Teixeira</i></p> <p>Tu.C1.4 15:30 Power transients in a cascade of three distributed Raman fibre amplifiers transmitting 10x10 GE channels over 383 km (Invited) <i>M. Karasek, J. Vojtech, J. Radil</i></p> <p>Tu.C1.5 15:50 All optical multichannel regeneration systems based on non linear effects (Invited) <i>G. Incerti, A. Teixeira, G.M. Tosi Beleffi, F. Curti, M. Guglielmucci</i></p> <p>Tu.C1.6 16:10 Influence of dispersion compensation granularity on the XPM-induced degradation in NRZ-IM-DD WDM links at 10 Gbit/s per channel with 50 GHz of channel spacing <i>N.M.S. Costa, T.M.F. Alves, A.V.T. Cartaxo</i></p>	<p>Tu.C2.4 14:45 Ultrafast all-optical differentiators based on fiber gratings (Invited) <i>J. Azaña, R. Slavík, Y. Park, M. Kulishov</i></p> <p>Tu.C2.5 15:05 Fast self-focusing of light in a photorefractive semiconductor for reconfigurable optical communications (Invited) <i>D. Wolfersberger, C. Dan, N. Khelfaoui, N. Fressengeas, H. Leblond</i></p> <p>Tu.C2.6 15:25 Low-cost micro-optical modules for datacommunication to optical interconnections from the LAN- to the PCB-level (Invited) <i>J. Van Erps, C. Debaes, M. Vervaeke, H. Ottevaere, P. Vynck, V. Gomez, L. Desmet, S. Van Overmeire, A. Hermanne, H. Thienpont</i></p>	<p>Tu.C3.3 15:00 Design of reliable Metro core networks (Invited) <i>P. Castoldi, F. Cugini, P. Ghelfi, L. Valcarenghi, G. Franzl, P. Gravey, M. Morvan, L. Rea, F. Matera, K. Wajda</i></p> <p>Tu.C3.4 15:20 Physical-layer considerations for the realistic deployment of impairment-aware connection provisioning (Invited) <i>C. Pinart, E. Le Rouzic, I. Martínez</i></p> <p>Tu.C3.5 15:40 Multi-domain resilience: can I share protection resources with my competitors? (Invited) <i>T. Cinkler, J. Szigeti, L. Gyarmati</i></p> <p>Tu.C3.6 15:40 Which resilience for the optical internet? An e-Photon/ONE+ outlook (Invited) <i>L. Valcarenghi, R. Inkret, B. Mikac, A. Pattavina, M. Tornatore, M. Pickavet, K. Wajda, L. Wosinska</i></p>	
16:25 – 16:55 Coffee break 15:45 – 16:15 Coffee break 16:15 – 16:45 Coffee break			
<p style="text-align: center;">SESSION Tu.D1 (16:55–18:45 Aula Magna)</p> <p style="text-align: center;">ICTON VI (General) <i>Chair: Jochen Leibrich</i></p> <p>Tu.D1.1 16:55 On the effect of polarisation-mode dispersion on the channel capacity of coherent fibre-optic communication systems (Invited) <i>B. Goebel, M. Kuschnerov, N. Hanik</i></p> <p>Tu.D1.2 17:15 Unusual polarization properties of single-mode randomly birefringent spun fibers (Invited) <i>A. Galtarossa, M. Guglielmucci, L. Palmieri, L. Schenato</i></p> <p>Tu.D1.3 17:35 Local birefringence in optical fibers for low-PMD performances (Invited) <i>M. Ferrario, S.M. Pietralunga</i></p> <p>Tu.D1.4 17:55 Photonics in switching in NoE e-Photon/One+ (Invited) <i>C. Raffaelli, L. Wosinska, N. Andriolli, F. Callegati, P. Castoldi, W. Kabaciński, G. Maier, A. Pattavina, L. Valcarenghi</i></p>	<p style="text-align: center;">SESSION Tu.D2 (16:15 – 18:15 Room 22)</p> <p style="text-align: center;">NAON IV (Lasers II) <i>Chair: Delphine Wolfersberger</i></p> <p>Tu.D2.1 16:15 Micro-lasers for future generation of optical systems (Invited) <i>H.T. Hattori, I. Mc Kerracher, H.H. Tan, C. Jagadish</i></p> <p>Tu.D2.2 16:35 InP-based monolithic mode-locked 40 GHz lasers for high-speed transmission systems utilizing phase modulation formats (Invited) <i>R. Kaiser, B. Hüttl</i></p> <p>Tu.D2.3 16:55 Timing jitter in compact passively mode-locked quantum-dot lasers (Invited) <i>F. Kéfélian, J.P. Tourrenc, M.T. Todaro, S. O'Donoghue, S.P. Hegarty, G. Huyet, J.G. McInerney</i></p> <p>Tu.D2.4 17:15 A novel two-section tunable slotted Fabry-Pérot laser exhibiting ns wavelength switching (Invited) <i>R. Phelan, W.H. Guo, Q.Y. Lu, D. Byrne, B. Roycroft, P. Lambkin, B. Corbett, J.F. Donegan</i></p>	<p style="text-align: center;">SESSION Tu.D3 (16:45 – 18:45 Room 21)</p> <p style="text-align: center;">RONEXT II (Free Space Optics) <i>Chairs: Erich Leitgeb & Fary Ghassemlooy</i></p> <p>Tu.D3.1 16:45 Recent developments in optical wireless communications using infrared and visible light (Invited) <i>K.-D. Langer, J. Grubor</i></p> <p>Tu.D3.2 17:05 Investigation in free space optical communication links between unmanned aerial vehicles (UAVs) (Invited) <i>E. Leitgeb, K. Zettl, S.S. Muhammad, N. Schmitt, W. Rehm</i></p> <p>Tu.D3.3 17:25 Free-space optical communication using subcarrier modulation in gamma-gamma atmospheric turbulence (Invited) <i>Z. Ghassemlooy, W.O. Popoola, E. Leitgeb</i></p> <p>Tu.D3.4 17:45 The performance of PPM using neural network and symbol decoding for diffused indoor optical wireless links <i>S. Rajbhandari, Z. Ghassemlooy, M. Angelova</i></p>	

Tu.D1.5 18:15	Ultra high-speed optical transmission based on LDPC-coded modulation and coherent detection for employment in all-optical network scenario <i>I.B. Djordjevic, M. Cvijetic, L. Xu, T. Wang</i>	Tu.D2.5 17:35	Dispersion compensation with chirped mirrors for compression of ultrashort laser pulses (Invited) <i>I.A. Sukhoivanov, S.O. Yakushev, O.V. Shulika, V.V. Lysak</i>	Tu.D3.5 18:00	BER characteristic of ground-to-train communication system using free-space optics technology <i>H. Kotake, S. Haruyama, M. Nakagawa, K. Seki</i>
Tu.D1.6 18:30	Centralised optical monitoring of tree-structured passive optical networks using a Raman-assisted OTDR <i>K. Yuksel, S. Lethoux, A. Grillet, M. Wuilpart, D. Giannone, J. Hancq, G. Ravet, P. Mégret</i>	Tu.D2.6 17:55	Simulation of intra-cavity contacted oxide-confined vertical cavity surface emitting lasers for 10Gb/s ultrashort optical interconnections (Invited) <i>V. Lysak, Y-T. Lee</i>	Tu.D3.6 18:10	Over-stratospheric-altitude optical free space links: system performance evaluation <i>S. Betti, V. Carrozzo, E. Duca</i>
				Tu.D3.7 18:30	VHDL based FPGA implementation of 256-ary PPM for free space optical links <i>S.S. Muhammad, P. Brandl, E. Leitgeb, O. Koudelka, I. Jelovcan</i>

POSTER SESSION Tu.P (during breaks between sessions, Building F Level -1)

- Tu.P.1** Matrix analysis of coupled microring resonator polygons
I. Chremmos, N. Uzunoglu
- Tu.P.2** Mode coupling between coupled first and second order whispering-gallery modes in coupled two microdisks
J-J. Li, J-X. Wang, Y-Z. Huang
- Tu.P.3** Continuous-wave electrically injected InP/GaInAsP equilateral-triangle-resonator lasers
Y-Z. Huang, Y-H. Hu, Q. Chen, S-J. Wang, Y. Du, Z-C. Fan
- Tu.P.4** Symmetric interacting whispering gallery modes in coupled dielectric microdisks
J-W. Ryu, S.W. Kim
- Tu.P.5** Optical modes in linear arrays of dielectric spherical particles: a numerical investigation
G.S. Blaustein, M.I. Gozman, I.Y. Polishchuk, A.L. Burin
- Tu.P.6** Strong mode selection scheme in a layered cylindrical microcavity laser with a thin dielectric inner coating
H-J. Moon, D-Y. Kang
- Tu.P.7** High quality direct photo-patterned microdisk lasers with organic/inorganic hybrid materials
X. Wu, Q. Song, H. Li, Z. He, Y. Zhang, L. Liu, L. Xu
- Tu.P.8** Effect of openness on resonance patterns in chaotic microcavities
S-Y. Lee
- Tu.P.9** Early time fields in stratified microdisk resonators with time discontinuity in permittivity
N. Sakhnenko, A. Nerukh
- Tu.P.10** Optical control of ring modes using tandem quasi-stadium laser diodes
T.K. Sasaki, Y. Nakae, M. Choi, T. Fukushima, T. Harayama
- Tu.P.11** Efficient nonresonant optical pumping of a deformed microcavity based on ray and wave chaos
J. Yang, S-B. Lee, J-B. Shim, S. Moon, S.W. Kim, J-H.. Lee, K. An
- Tu.P.12** Generalized Sagnac effect in rotating optical cavities
S. Sunada, T. Harayama, T. Miyasaka
- Tu.P.13** Beam mode observation in quasi-stadium laser diodes
Y. Nakae, H. Takehana, T. Sasaki, T. Fukushima, T. Harayama
- Tu.P.14** Two mode interactions in quasi-stadium laser diodes
M. Choi, T. Fukushima, T. Harayama
- Tu.P.15** High-quality-factor WG modes in semiconductor microcavity pillars with circular and elliptical cross section
V.N. Astratov, S. Yang, S. Lam, B.D. Jones, D. Sanvitto, D.M. Whittaker, A.M. Fox, M.S. Skolnick, A. Tahraoui, P.W. Fry, M. Hopkinson
- Tu.P.16** Far-field emission patterns and the emission positions of individual cavity modes in a highly deformed microcavity
S-B. Lee, J-B. Shim, J. Yang, S. Moon, S-W. Kim, J-H. Lee, K. An
- Tu.P.17** Pre- and post-fabrication tuning of bends in microdisk CROW sections: a numerical study
S.V. Pishko, S.V. Boriskina

- Tu.P.18** Single-mode whispering-gallery terahertz quantum-cascade lasers with controlled degeneracy
G. Fasching, V. Tamošiūnas, A. Benz, A.M. Andrews, Ch. Deutsch, R. Zobl, W. Schrenk, G. Strasser, K. Unterrainer
- Tu.P.19** Microring-based resonant cavity waveguide photodetectors for WDM optical systems
G. Abaeiani, V. Ahmadi, K. Saghafi
- Tu.P.20** Ray-wave correspondence in stadium-shaped optical cavities
S. Shinohara, T. Harayama
- Tu.P.21** Oscillatory lasing modes in a coupled circular microcavity
J. Cho, J. Lee, T-Y. Kwon, S. Rim, C-M. Kim
- Tu.P.22** Directional light output from a circular microdisk laser
T-Y. Kwon, J. Wiersig, M. Hentschel
- Tu.P.23** Far-field emission pattern of a dielectric circular microresonator with a point scatterer
C.P. Dettmann, G.V. Morozov, M. Sieber, H. Waalkens
- Tu.P.24** Linear optical analysis of microdisk lasers concentrically coupled with microrings
E.I. Smotrova, A.I. Nosich, T.M. Benson, P. Sewell
- Tu.P.25** Thresholds of lasing as solutions of characteristic equation for a VCSEL-type layered structure
V.O. Byelobrov, A.I. Nosich
- Tu.P.26** FDTD modelling of mid infrared disk lasers
J.R. Pugh, I.J. Buss, G.R. Nash, T. Ashley, A. Krier, M.J. Cryan, J.G. Rarity
- Tu.P.27** Varying the overlap of direct-coupling between spiral and semicircle semiconductor microdisk lasers
G.E. Fernandes, G.D. Chern, Q. Song, L. Xu, M. Kneissl, N.M. Johnson, R.K. Chang
- Tu.P.28** Emission properties of quantum dots in a levitated microdrop
J. Schaefer, J.P. Mondia, R. Sharma, Z.H. Lu, L.J. Wang

20:30

Gala Dinner at Consolini Restaurant, Via delle Capannelle 201 (BUS service will be available)

Wednesday, July 4

SESSION We.A1 (8:30–10:10 Aula Magna)	SESSION We.A2 (8:30 – 9:50 Room 22)	SESSION We.A3 (8:30 – 10:35 Room 21)	SESSION We.A4 (8:30 – 10:10 Room 20)
<p data-bbox="268 162 645 194">ICTON VII (Devices I)</p> <p data-bbox="268 203 645 235"><i>Chair: Massimo De Vittorio</i></p> <p data-bbox="142 243 768 349">We.A1.1 An optical board approach based on SOI (silicon-on-insulator) (<i>Invited</i>) <i>J. Bruns, T. Mitze, L. Zimmermann, K. Voigt, M. Schnarrenberger, K. Petermann</i></p> <p data-bbox="142 357 768 446">We.A1.2 Technology challenges for silicon nanophotonics and beyond (<i>Invited</i>) <i>L. Wosinski, L. Liu, M. Dainese, E. Berglind</i></p> <p data-bbox="142 454 768 609">We.A1.4 Bidirectional erbium-doped waveguide amplifiers and applications to optical networks (<i>Invited</i>) <i>S. Taccheo, G. Della Valle, K. Ennser</i></p> <p data-bbox="142 747 768 860">We.A1.5 Brillouin scattering in fiber optical parametric amplifiers (<i>Invited</i>) <i>D. Noordegraaf, M. Lorenzen, C. Vandel Nielsen, K. Rottwitt</i></p> <p data-bbox="142 950 768 1063">We.A1.6 Densely integrated photonic devices based on microring resonators for use in access networks (<i>Invited</i>) <i>E.J. Klein, A. Driessen</i></p>	<p data-bbox="887 162 1263 194">ESPC IV (Modelling II)</p> <p data-bbox="887 203 1263 235"><i>Chair: Alexei Popov</i></p> <p data-bbox="768 243 1395 349">We.A2.1 Modelling and measurement of electronically tunable photonic crystals (<i>Invited</i>) <i>M.J. Cryan, P. Ivanov, D. Snoswell, C. Bower, B. Vincent, J.G. Rarity</i></p> <p data-bbox="768 357 1395 495">We.A2.2 Eigenstates of photonic crystal structures visualized in real space and in k-space (<i>Invited</i>) <i>R.J.P. Engelen, Y. Sugimoto, H. Gersen, N. Ikeda, K. Asakawa, L. Kuipers</i></p> <p data-bbox="768 503 1395 584">We.A2.3 Limits of geometrical scaling of split rings and double-bar resonators in the visible (<i>Invited</i>) <i>S. Tretyakov</i></p> <p data-bbox="768 747 1395 917">We.A2.6 Fabrication of polarizing photonic crystal fibres and photonic crystal fibre tapers: applications (<i>Invited</i>) <i>M. Delgado-Pinar, J. Cascante-Vindas, S. Torres-Peiró, T. Pinheiro-Ortega, E. Silvestre, A. Diez, J.L. Cruz, M.V. Andrés</i></p>	<p data-bbox="1532 162 1800 194">RONEXT III</p> <p data-bbox="1532 203 1854 235"><i>Chair: Lena Wosinska</i></p> <p data-bbox="1395 243 2021 349">We.A3.1 How a network can “think globally and act locally” and avoid the hazards of incoherence in distributed state information (<i>Invited</i>) <i>W.D. Grover</i></p> <p data-bbox="1395 357 2021 438">We.A3.2 Service requirements in optical network design (<i>Invited</i>) <i>M. Jaeger</i></p> <p data-bbox="1395 495 2021 584">We.A3.3 An evaluation for PCE Selection schemes for inter-domain path computation (<i>Invited</i>) <i>T. Saad, J. Israr, S. Sivabalan, H.T. Mouftah</i></p> <p data-bbox="1395 747 2021 812">We.A3.4 Optical corridor routing protocols (<i>Invited</i>) <i>S. Das, P. Monti, M. Tacca, A. Fumagalli</i></p> <p data-bbox="1395 950 2021 1031">We.A3.5 Reliable control and management plane design in multi-domain optical networks <i>P. Szegedi, J. Szigeti, T. Cinkler</i></p> <p data-bbox="1395 1144 2021 1258">We.A3.6 Experimental evaluation of OMS protection in GMPLS-based optical networks <i>L. Velasco, S. Spadaro, J. Comellas, G. Junyent</i></p> <p data-bbox="1395 1266 2021 1347">We.A3.7 A new absolute QoS differentiation scheme supporting best-effort class in OBS networks <i>H. Lui, H.T. Mouftah</i></p>	<p data-bbox="2096 162 2553 194">Special Session: Novel Glasses I</p> <p data-bbox="2177 203 2472 235"><i>Chair: Joris Lousteau</i></p> <p data-bbox="2021 243 2655 349">We.A4.1 Review: fine embossing of novel glasses for photonic integrated circuits (<i>Invited</i>) <i>A.B. Seddon, D. Furniss, W.J. Pan, P. Sewell, A. Loni, Y. Zhang, T.M. Benson</i></p> <p data-bbox="2021 357 2655 470">We.A4.2 Novel glass hosts for integrated planar amplifiers in the optical communication window (1200-1700 nm) (<i>Invited</i>) <i>G. Jose, P. Nandi, S. Shen, J. Zhang, A. Jha</i></p> <p data-bbox="2021 495 2655 747">We.A4.3 Nanocomposite photonic glasses, waveguiding glass ceramics, and confined structures tailoring Er³⁺ spectroscopic properties (<i>Invited</i>) <i>C. Armellini, A. Chiappini, A. Chiasera, M. Ferrari, Y. Jestin, P.H. Huy, M. Mattarelli, L. Minati, M. Montagna, E. Moser, G. Nunzi Conti, S. Pelli, G.C. Righini, G. Speranza, C. Tosello, K. Tran Ngoc</i></p> <p data-bbox="2021 747 2655 941">We.A4.4 Waveguide lasers in Er:Yb-doped phosphate glass fabricated by femtosecond laser writing (<i>Invited</i>) <i>G. Della Valle, R. Osellame, S. Taccheo, N. Chiodo, G. Galzerano, G. Cerullo, P. Laporta, R. Ramponi, U. Morgner, A.C. Ferrari</i></p> <p data-bbox="2021 950 2655 1144">We.A4.5 Antimony glasses with large nonlinear refractive indices, low two-photon absorption coefficients and ultrafast response at telecom wavelengths (<i>Invited</i>) <i>C.B. de Araújo, L.A. Gómez, E.L. Falcão Filho, D.N. Messias, L. Misoguti, S.C. Zílio, M. Nalin, Y. Messaddeq</i></p>
10:10 – 10:40	9:50 – 10:20	10:35 – 11:05	10:10 – 10:40
Coffee break	Coffee break	Coffee break	Coffee break

SESSION We.B1 (10:40–12:40 Aula Magna)**ICTON VIII (Devices II)***Chair: Klaus-Dieter Langer***We.B1.1** MMI devices for photonic signal processing 10:40 (*Invited*)
*L.W. Cahill, T.T. Le***We.B1.2** Cost-efficient pulse source for broadband photonic communication systems (*Invited*) 11:00
*P.M. Anandarajah, L.P. Barry***We.B1.3** Novel infrared emitter for low cost optical devices (*Invited*) 11:20
*S. Penna, A. Reale, R. Pizzoferrato, D. Musella, G.M. Tosi Beleffi, W.P. Gillin***We.B1.4** Transient phenomena and time-dependent resonance self-action in phase-modulated laser beams (*Invited*) 11:40
*V.L. Derbov, V.V. Serov, I.L. Plastun, A.V. Trofimov***We.B1.5** Spectral management of solitons interaction and generation regimes of fiber laser (*Invited*) 12:00
*A. Komarov, K. Komarov, H. Leblond, F. Sanchez***We.B1.6** Photopolymerized optical fiber technology 12:20 (*Invited*)
K. Ozga, A. Ślęzak

12:40 – 14:10

Lunch break**SESSION We.C1 (14:10–16:10 Aula Magna)****PICAW***Chair: Stefano Taccheo***We.C1.1** Progress in large integration scale circuits in SION technology (*Invited*) 14:10
*A. Melloni, F. Morichetti, G. Cusmai, R. Costa, A. Breda, C. Canavesi, M. Martinelli***We.C1.2** Optical printed circuit board (O-PCB) as a platform for VLSI micro/nano-photonic circuits and networks (*Invited*) 14:30
*E-H. Lee***We.C1.3** Ultrafast all-optical signal processing using chalcogenide glass based photonic chips (*Invited*) 14:50
*V.G. Ta'eed, B. Eggleton***SESSION We.B2 (10:20 – 12:20 Room 22)****ESPC V (Nonlinear Phenomena)***Chair: Kanna Aoki***We.B2.1** Broadband mode converters in photonic crystal fibres (*Invited*) 10:20
*T. Birks, A Witkowska, S Leon-Saval, K. Lai, W. Wadsworth***We.B2.2** Photonic crystal assisted polymeric optical field concentrator (*Invited*) 10:40
*D. de Ceglia, A. D'Orazio, M. De Sario, V. Petruzzelli, M.A. Vincenti, F. Prudenzano, M.J. Bloemer, M. Scalora***We.B2.3** Spatial solitons in quadratic 2D nonlinear photonic crystals (*Invited*) 11:00
*K. Gallo, A. Pasquazi, S. Stivala, G. Assanto***We.B2.4** Optical parametric amplification of narrow beams under subdiffractive propagation in photonic crystals (*Invited*) 11:20
*K. Staliunas, Yu. Loiko, R. Herrero, J. Trull, C. Cojocar***We.B2.5** Advances in fibre based pulse shaping technology and its applications in optical communications (*Invited*) 11:40
*D.J. Richardson, P. Petropoulos, F. Parmigiani, P.J. Almeida, C. Tian, T.T. Ng, Z. Zhang, M. Ibsen***We.B2.6** Microstructured optical fiber sensors (*Invited*) 12:00
G. Calò, A. D'Orazio, M. De Sario, L. Mescia, V. Petruzzelli, F. Prudenzano

12:20 – 13:50

Lunch break**SESSION We.C2 (13:50 – 15:50 Room 22)****NAON V (Modelling & Technology)***Chair: Severine Philippe***We.C2.1** Minimizing roughness loss for ultra-compactly bent high-index contrast waveguides (*Invited*) 13:50
*W. Freude, C. Koos, C.G. Poulton, M. Fujii, J. Leuthold***We.C2.2** Modeling Q-factors of micro pillars (*Invited*) 14:10
*T.R. Nielsen, N. Gregersen, B. Tromborg, J. Mørk***We.C2.3** Nanoscale heat transport in synthetic opals (*Invited*) 14:30
*R. Li Voti***SESSION We.B3 (11:05 – 13:05 Room 21)****WAOR IV***Chair: Jose Marzo***We.B3.1** Analytical evaluation and implementation of a novel slotted optical switching scheme with two way reservations (*Invited*) 11:05
*J.D. Angelopoulos, K. Kanonakis, H.C. Leligou, T. Orphanoudakis, T. Politi***We.B3.2** Cost comparison of optical packet switches with shared wavelength converters (*Invited*) 11:25
*C. Raffaelli, M. Savi***We.B3.3** Design and performance of FDL buffers in optical switches (*Invited*) 11:45
*Z. Rosberg, H. Le Vu***We.B3.4** Scalable designs for all-optical packet-switching nodes (*Invited*) 12:05
*R. Van Caenegem, D. Colle, M. Pickavet, P. Demeester***We.B3.5** A hybrid optical switch architecture with shared electronic buffers (*Invited*) 12:25
*T.G. Orphanoudakis, A. Drakos, C. Matrakidis, C. Politi, A. Stavdas***We.B3.6** An optical interconnection architecture for large packet switches (*Invited*) 12:45
A. Bianco, E. Carta, D. Cuda, J.M. Finochietto, F. Neri

13:05 – 14:30

Lunch break**SESSION We.C3 (14:30 – 16:30 Room 21)****GOWN I***Chair: Aleksandra Kaszubowska-Anandarajah***We.C3.1** Radio over fiber technologies and systems: new opportunities (*Invited*) 14:30
*M. Fabbri, P. Faccin***We.C3.2** Radio-over-fiber (RoF) techniques for broadband wireless LAN (*Invited*) 14:50
*S. Betti, V. Carrozzo, E. Duca, G. Parca***We.C3.3** Multi-channel super high frequency TV signal transmission system (*Invited*) 15:10
*K. Kikushima, T. Fujiwara, S. Ikeda***SESSION We.B4 (10:40 – 12:20 Room 20)****Special Session: Novel Glasses II***Chair: Trevor Benson***We.B4.1** Chalcogenide photonic crystal fibers for near and middle infrared applications (*Invited*) 10:40
*J. Troles, L. Brilland, F. Smektala, N. Traynor, P. Houzot, F. Desevedavy***We.B4.2** Novel telluride glasses and nanocluster doped silica for photonics (*Invited*) 11:00
*D. Milanese, Q. Chen, G. Liao, J. Xing, D. Chiaretta, M. Fokine, M. Ferraris***We.B4.3** Fabrication of multicore tellurite glass optical fibres (*Invited*) 11:20
*J. Lousteau, H. Bookey, X. Jiang, C. Hill, A. Jha***We.B4.4** Efficient slow light generation using highly nonlinear non-silica-based fibers (*Invited*) 11:40
*K.S. Abedin***We.B4.5** Alternative dopants for silica fibre amplifiers (*Invited*) 12:00
B. Dussardier, W. Blanc

12:20

Lunch

<p>We.C1.4 High-speed switching in fibres with electrodes 15:10 <i>(Invited)</i> L-E. Nilsson, Z. Yu, O. Tarasenko, H. Knape, P-Y. Fonjallaz, W. Margulis</p>	<p>We.C2.4 Nanoimprint lithography for optical components 14:50 <i>(Invited)</i> G. Scarpa, F. Brunetti, S. Harrer, P. Lugli</p>	<p>We.C3.4 MAC design in pulse-based communication 15:30 systems <i>(Invited)</i> M.G. Di Benedetto, L. De Nardis</p>	
<p>We.C1.5 Hybrid organic-inorganic for low-cost photonics 15:30 integration <i>(Invited)</i> M. Fallahi</p>	<p>We.C2.5 Optical fibre nanowires and related structures 15:10 <i>(Invited)</i> G. Brambilla, F. Xu</p>	<p>We.C3.5 Efficient evaluation of far-field asymptotic 15:50 series <i>(Invited)</i> R. Borghi, M. Alonso</p>	
<p>We.C1.6 Silicon on insulator based integrated tunable 15:50 add & drop module for metro DWDM networks <i>(Invited)</i> A. Cabas, M. Di Muri, S. Doneda, P. Galli, S. Ghidini, F. Giacometti, S. Lorenzotti, G. Mutinati, A. Nottola, M. Romagnoli, S. Sardo, L. Socci, T. Tomasi, G. Zuliani, M. Gentili, G. Grasso, M. Romagnoli</p>	<p>We.C2.6 Optically induced electrogyrators based on 15:30 nanomaterials <i>(Invited)</i> I.V. Kityk</p>	<p>We.C3.6 Electronic equalization of photodetection by 16:10 means of an SQRT module <i>(Invited)</i> J. Prat, M. Omella, P. Poggiolini, G. Bosco, R. Killey, A. Teixeira, R. Sousa</p>	
16:10 – 16:40	15:50 – 16:20	16:30 – 17:00	
Coffee break	Coffee break	Coffee break	
SESSION We.D1 (16:40–18:40 Aula Magna)	SESSION We.D2 (16:20 – 18:20 Room 22)	SESSION We.D3 (17:00 – 19:00 Room 21)	
ESPC VI (Technology)	NAON VI (Signal Regeneration)	GOWN II	
<i>Chair: Romuald Brazis</i>	<i>Chair: Hitoshi Kawaguchi</i>	<i>Chair: Hovik Baghdasaryan</i>	
<p>We.D1.1 Holey fibers filled with liquids and sol-gel 16:40 materials <i>(Invited)</i> P. Casara, F. Carollo, P. Facchin, M. Santagiustina, C.G. Someda, G. Brusatin, A. Martucci, K. Oh</p>	<p>We.D2.1 New approaches to perform all-optical signal 16:20 regeneration <i>(Invited)</i> J. Leuthold, J. Wang, T. Vallaitis, Ch. Koos, R. Bonk, A. Marculescu, P. Vorreau, S. Sygletos, W. Freude</p>	<p>We.D3.1 RF or THz signals generated from DC biased 17:00 multimode lasers <i>(Invited)</i> S. Latkowski, F. Surre, P. Landais</p>	
<p>We.D1.2 Artificial opals as nanophotonic materials for 17:00 optics communications <i>(Invited)</i> A.V. Lavrinenko, R.J. Leyrer, W. Wohlleben, N. Dissaux, K. Heggarty, M. Boyle, R. Kiyani, A. Neumeister</p>	<p>We.D2.2 All-optical generation and control of spin 16:40 currents <i>(Invited)</i> H.M. van Driel, J.E. Sipe, A.L. Smirl</p>	<p>We.D3.2 Effects of semiconductor optical amplifier 17:20 phase distortion in radio over fiber signals <i>(Invited)</i> S. Di Bartolo, A. Teixeira, G.M. Tosi Belefli, F. Curti</p>	
<p>We.D1.3 Focused-ion-beam processing for photonics 17:20 <i>(Invited)</i> R.M. de Ridder, W.C.L. Hopman, F. Ay</p>	<p>We.D2.3 Application of semiconductor optical amplifiers 17:00 in high-speed all-optical NRZ to RZ format conversion <i>(Invited)</i> X. Yang, R.J. Manning, A.K. Mishra, R.P. Webb, A.D. Ellis, D. Cotter</p>	<p>We.D3.3 Discrete mode lasers for applications in access 17:40 networks <i>(Invited)</i> A. Kaszubowska-Anandarajah, L. Barry, P. Anandarajah, C. Guignard, B. Kelly, J. O’Gorman</p>	
<p>We.D1.4 Arrayed 3D photonic crystals for optical 17:40 communication wavelengths <i>(Invited)</i> K. Aoki, D. Guimard, M. Nishioka, T. Katsuyama, S. Iwamoto, Y. Arakawa</p>	<p>We.D2.4 Clock synchronization and sub-clock extraction 17:20 of optical signals at high rates using an opto- electronic PLL based on three-wave mixing in PPLN <i>(Invited)</i> F. Gómez Agis, C. Ware, D. Erasme</p>	<p>We.D3.4 Applications of the slow and fast light effects in 18:00 SOA-EA structures in the radio over fiber links <i>(Invited)</i> S. Sales, F. Öhman, J. Capmany, J. Mørk</p>	
<p>We.D1.5 Improved efficiency Bragg grating inscription in 18:00 a commercial solid core microstructured optical fiber <i>(Invited)</i> G. Violakis, S. Pissidakis</p>	<p>We.D2.5 Multi-wavelength regenerative amplification 17:40 based on quantum-dot semiconductor optical amplifiers <i>(Invited)</i> S. Sygletos, M. Spyropoulou, P. Vorreau, R. Bonk, I. Tomkos, W. Freude, J. Leuthold</p>	<p>We.D3.5 Millimeter-wave optical subcarrier generation 18:20 by using an external modulator and optical carrier suppression <i>(Invited)</i> J. Ma, X. Xin, Ch. Yu, Q. Zhang, J. Yu, X. Sang, J. Zeng</p>	
<p>We.D1.6 Langmuir-Blodgett approach versus self- 18:20 organization in realization of colloidal photonic crystals and hetero-crystals – pros and cons <i>(Invited)</i> S.G. Romanov, M. Szachowicz, M. Bardosova, I. Povey, M. Pemble, C.M. Sotomayor-Torres</p>	<p>We.D2.6 Bright solitons in lithium niobate generate 18:00 volume waveguides, basic elements for 3-D integrated circuits <i>(Invited)</i> E. Fazio</p>	<p>We.D3.6 Indoor communications applying an optical 18:40 backbone <i>(Invited)</i> T. Berceci, E. Udvary</p>	

POSTER SESSION We.P (during breaks between sessions, , Building F Level -1)

- We.P.1** Optical FM demodulation by fibre Bragg grating
J.Z. Sotor, A.J. Antończak, K.M. Abramski
- We.P.2** Noise figure characterization in erbium doped fibers for remotely amplified PONs
F. Bonada, J.A. Lázaro, J. Prat
- We.P.3** Detection of scattered light in fiber-free space-object configurations
A. Waz, P.R. Kaczmarek, K.M. Abramski
- We.P.4** Diode pumped compact Nd:YAG/BiBO blue laser at 473 nm
A.J. Antończak, M. Matysiak, J.Z. Sotor, K.M. Abramski
- We.P.5** Influence of external optical feedback on mode-locked laser diode dynamics
E.A. Avrutin, B.M. Russell
- We.P.6** Passively mode-locked EDF ring laser
M. Nikodem, G. Tomczyk, A. Budnicki, K.M. Abramski
- We.P.7** Characterization of external cavity laser with thin film narrow bandpass filter
S-H. Seong, S-W. Ryu, H-J. Ko, J-S. Kim
- We.P.8** Side pumped polarization maintaining double-clad fiber laser
A. Bocheński, J. Palmowski, M. Napierała, E. Bereś-Pawlik, K. Jędrzejewski
- We.P.9** Supercontinuum generation in the standard telecommunication fibers pumped by ns-pulses from Q-switched FSF fiber laser
N. Trela, P.R. Kaczmarek, K.M. Abramski
- We.P.10** Actively mode-locked multiwavelength fibre ring laser incorporating a Lyot filter, hybrid gain medium and birefringence compensated LiNbO₃ modulator
C. O’Riordan, M.J. Connelly, I. Evans, P.M. Anandarajah, R. Maher, L.P. Barry
- We.P.11** Performance study of a time slot interchanger based on a MZI-SOA in the switch configuration
R. Meleiro, J. Castro, P. André, P. Monteiro
- We.P.12** Ternary amplitude optical packets generated by parametric amplification
M.L.F. Abbade, F.A. Callegari, E. Moschim, F.R. Durand, F.R. Barbosa
- We.P.13** Ultra fast switching by controlling Rabi splitting
G. Manzacca, K. Hingler, G. Cincotti
- We.P.14** Experimental analysis of four-wave mixing in a semiconductor optical amplifier using frequency resolved optical gating
B.F. Kennedy, K. Bondarczuk, L.P. Barry
- We.P.15** Distributed coupling coefficient DFB SOA-based optical switch
M.S. Tahvili, M.H. Sheikhi
- We.P.16** Evaluation and optimization of SOA-based UNI Q-factor
K.E. Zoiros, C. Botsiaris, R. Chasioti, C.S. Koukourlis
- We.P.17** Focusing characteristics of chirped hologram gratings written in polymer dispersed liquid crystals (PDLC)
T.H. Baghdasaryan, A. Galstyan, R. Hakobyan
- We.P.18** Theoretical and experimental study of temperature-dependent spectral properties of multi-layer metal-dielectric nano-film structures
V.N. Boriskina, M.I. Ayzatsky, S.V. Boriskina, Y.P. Machehin, A. Semenov
- We.P.19** Propagation of optical field in nonlinear photonic crystals
S. Dontu, V. Babin, C. Grigorescu, D. Savastru, M. Miclos, M.I. Rusu, D. Tenciu
- We.P.20** New phase-change materials to achieve cognitive computing – overview and future trends
M.I. Rusu, S. Miclos, D. Savastru, M. Popescu
- We.P.21** Finite difference beam propagation method applied to photonic crystal fibres
M. Zdanowicz, M. Marciniak, M. Jaworski E. Bekker, T.M. Benson
- We.P.22** Control of the spontaneous emission of single InAs quantum dots at 1.3μm in point-defect photonic crystal nanocavities
M. Francardi, L. Balet, A. Gerardino, N. Chauvin, B. Alloing, C. Zinoni, C. Monat, L.H. Li, N. Le Thomas, R. Houdré, A. Fiore
- We.P.23** Differential group index dispersion of a holey fiber measured by white-light spectral interferometry
P. Hlubina, D. Ciprian, R. Chlebus
- We.P.24** Electrical reorientation of liquid crystal within silicon macropore for photonic devices
A.A. Dyomin, G.V. Tkachenko, V. Tkachenko, G. Abbate, L. De Stefano, I.A. Sukhoivanov

- We.P.25** Modeling of transparent in visible range metal-dielectric multilayer structure by the MSE
G.G. Eyrarmjyan, H.V. Baghdasaryan, T.M. Knyazyan
- We.P.26** High orbital angular momentum of singular and Gaussian beams arrays
Y. Izdebskaya, V. Shvedov, A. Volyar
- We.P.27** Analyses of all-optical ultra-fast gate switches using cascaded second-order nonlinear effect in periodically poled lithium niobate waveguides: methods of performance enhancement and effects of device fabrication errors
Y. Fukuchi, T. Tanaka, K. Watanabe, M. Akaike
- We.P.28** Computer modelling and optimisation of mode-locked lasers
N. Dogru, M.J. Adams, I.D. Henning
- We.P.29** Ray tracing method applied for DC fibers
J.S. Witkowski, A. Grobelny
- We.P.30** Hybrid time-frequency domain eigenmode propagation analysis of optical waveguides based on the method of lines
J. Gerdes
- Th.A2.5** Nonlinear gain and related effects in quantum-well heterostructures
V.K. Kononenko

20:00

Barbecue Dinner at Instituto Superiore Antincendi

Thursday, July 5

SESSION Th.A1 (8:30–10:30 Aula Magna)

ICTON IX (Modelling)

Chair: Vladimir Derbov

- Th.A1.1** 8:30 The continuing role of beam propagation methods in photonics design (*Invited*)
T.M. Benson, E. Bekker, A. Vukovic, P. Sewell
- Th.A1.2** 8:50 Adaptive simulation of optical ASICs (*Invited*)
P. Sewell, T.M. Benson, A. Vukovic, C. Styan
- Th.A1.3** 9:10 Wide-angle alternating-direction implicit finite-difference BPM (*Invited*)
E.V. Bekker, P. Sewell, T.M. Benson, A. Vukovic
- Th.A1.4** 9:30 Waveguiding and resonant cylindrical structures with time varying permittivity (*Invited*)
N. Sakhnenko, A. Nerukh
- Th.A1.5** 9:50 Extension and application of the method of single expression (MSE) for analysis of plane electromagnetic wave oblique incidence on a dielectric slab (*Invited*)
H.V. Baghdasaryan, T.M. Knyazyan, T.H. Baghdasaryan, G.G. Eyrarmjyan
- Th.A1.6** 10:10 Fundamental limits and recent advances in slow and fast light systems based on optical parametric processes in fibers (*Invited*)
E. Shumakher, A. Willinger, G. Eisenstein

SESSION Th.A2 (8:30 – 10:30 Room 22)

NAON VII

Chair: Snjezana Tomljenovic-Hanic

- Th.A2.1** 8:30 SOAs for all-optical switching - techniques for improvements in speed (*Invited*)
R.J. Manning, R. Giller, Xu. Yang, R.P. Webb, D. Cotter
- Th.A2.2** 8:50 Dynamics of nonlinear polarisation rotation in semiconductor optical amplifiers (*Invited*)
S. Philippe, A.L. Bradley, F. Surre, B. Kennedy, P. Landais
- Th.A2.3** 9:10 Polarization dependent intra-band gain dynamics in semiconductor optical amplifiers (*Invited*)
S. Philippe, F. Surre, A.L. Bradley, R. Maldonado-Basilio, B. Kennedy, P. Landais, H. Soto-Ortiz
- Th.A2.4** 9:30 New asymmetric quantum well travelling-wave electroabsorption modulator with very low insertion loss and high extinction ratio (*Invited*)
V. Ahmadi, K. Abedi, E. Darabi
- Th.A2.6** 9:50 Electromodulation-absorption type spectroscopy of semiconductor structures applied in telecommunication lasers (*Invited*)
J. Misiewicz, G. Sęk, R. Kudrawiec, M. Motyka

SESSION Th.A3 (8:30 – 10:10 Room 21)

WAOR V

Chair: Josep Segarra

- Th.A3.1** 8:30 Service management in advanced optical internet (*Invited*)
E. Kozlovski
- Th.A3.2** 8:50 Network processors: a practical approach for achieving wire-speed packet processing in the emerging optical backbone networks (*Invited*)
J. Veiga-Gontán, P. Pavón-Mariño, J. García-Haro, M. Rodelgo, C. López-Bravo, F.J. González-Castaño
- Th.A3.3** 9:10 Transmission performance of optically transparent metro edge nodes (*Invited*)
S. Aleksić
- Th.A3.4** 9:30 OBS vs. OpMiGua – a comparative performance evaluation (*Invited*)
J. Scharf, A. Kimsas, M. Köhn, G. Hu
- Th.A3.6** 9:50 Grooming strategies for GMPLS controlled WDM networks (*Invited*)
J. Comellas, J. Perelló, F. Agraz, S. Spadaro, G. Junyent
- Th.A3.7** 10:10 Physical constraint-aware dynamic transparent WDM networks (*Invited*)
D. Bayart

10:30 – 11:00

Coffee break

10:10 – 10:40

Coffee break

10:30 – 11:00

Coffee break

SESSION Th.B1 (11:00–12:55 Aula Magna)

Special Session: Broadband Access

Chair: Josep Prat

- Th.B1.1** 11:00 CROWN – converged optical and wireless networks: network architecture and routing algorithms (*Invited*)
L.G. Kazovsky, N. Cheng, W-T. Shaw, S.-W. Wong
- Th.B1.2** 11:20 Optical next-generation access networks featuring combined WDM and TDM (*Invited*)
C. Bock, J. Prat, S.D. Walker

SESSION Th.B2 (10:40 – 12:20 Room 22)

NAON VIII (Quantum Dots)

Chair: Guido Giuliani

- Th.B2.1** 10:40 Quantum dot materials and devices (*Invited*)
G. Huyet
- Th.B2.2** 11:00 High gain and high speed 1.3 μm InAs/InGaAs quantum dot lasers (*Invited*)
M.T. Todaro, A. Salhi, L. Fortunato, R. Cingolani, A. Passaseo, M. De Vittorio

SESSION Th.B3 (11:00 – 12:35 Room 21)

WAOR VI

Chair: Zvi Rosberg

- Th.B3.1** 11:00 All-optical signal processing using gain-clamped semiconductor optical amplifiers (*Invited*)
T. Silveira, A. Teixeira, A. Ferreira, G.M. Tosi Beleffi, D. Forin, S. Stevan Jr, P. Monteiro
- Th.B3.2** 11:20 Investigation of optical-burst-transmission induced impairment in gain-clamped amplifiers (*Invited*)
K. Ennser, G. Della Valle, S. Taccheo, J. Aracil

<p>Th.B1.3 10G EPON development process (<i>Invited</i>) 11:40 <i>M. Hajduczenia, H.J.A. da Silva, P. Monteiro</i></p>	<p>Th.B2.3 Multi wavelength ultrahigh frequency amplification by quantum dot semiconductor optical amplifiers (<i>Invited</i>) 11:20 <i>C. Meuer, M. Laemmlin, J. Kim, G. Eisenstein, D. Bimberg</i></p>	<p>Th.B3.3 Tuneable optical dispersion compensators for dynamic optical networks (<i>Invited</i>) 11:40 <i>R. Nogueira, A. Teixeira, M. Violas, R. Sousa, P. André, T. Silveira, R. Olcina, S. Sales</i></p>	
<p>Th.B1.4 Is a 10/2.5Gbit/s extra-large PON far from reality? (<i>Invited</i>) 12:00 <i>M. Rasztoivits-Wiech, A. Stadler, S. Gianordoli, K. Kloppe</i></p>	<p>Th.B2.4 Design of non-linear guiding structures for processing of the ultra-short laser pulses (<i>Invited</i>) 11:40 <i>E. Romanova, V. Janyani, A. Vukovic, P. Sewell, T. Benson</i></p>	<p>Th.B3.4 Hybrid buffer structured optical packet switch with the optimum numbers of tunable wavelength converters and internal wavelengths 12:00 <i>H. Lim, J. Kim, C. Oh</i></p>	
<p>Th.B1.5 Traffic performance of an access hybrid WDM/TDM PON with colorless reflective-ONUs under different distances OLT-ONUs (<i>Invited</i>) 12:20 <i>J. Segarra, V. Sales, J. Prat</i></p>	<p>Th.B2.5 Optical properties and electronic transport in quantum dot structures (<i>Invited</i>) 12:00 <i>K. Král</i></p>	<p>Th.A3.5 Adaptive multi-path routing for OBS networks (<i>Invited</i>) 12:15 <i>C.G. Argos, O.G. de Dios, J. Aracil</i></p>	
<p>Th.B1.6 1.25-10 Gbit/s reconfigurable access network architecture 12:40 <i>P.J. Urban, E.J. Klein, L. Xu, E.G.C. Pluk, A.M.J. Koonen, G.D. Khoe, H. de Waardt</i></p>			
<p>12:55 Closing Ceremony & Announcement of ICTON 2008</p>			
<p>Lunch</p>			