



### ICC 2013 Optical Networks and Systems Symposium

Symposium Co-Chairs:

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The 2013 IEEE International Conference on Communications (ICC) will be held in the vibrant city of Budapest, Hungary from 9 – 13 June 2013. This flagship conference of IEEE Communications Society aims at addressing an essential theme on “Bridging the Broadband Divide.” The conference will feature a comprehensive technical program including several Symposia and a number of Tutorials and Workshops. IEEE ICC 2013 will also include an attractive expo program including keynote speakers, various Business, Technology and Industry fora, and vendor exhibits. We invite you to submit your original technical papers, industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2013 Conference Proceedings and in IEEE Xplore®. Full details of submission procedures are available at <http://www.ieee-icc.org/2013>.

#### Scope and Topics of Interest

The ICC 2013 Optical Networks and Systems Symposium will focus on new exploratory research results as well as on practical solutions in the area of optical networking and enabling systems. Optical technology is expected to continue to expand in the communication networks in order to meet the yet increasing traffic demand. There are various new solutions to extend the capacity and the reach of networks on the one hand, while improving network flexibility, operability, energy efficiency and quality on the other hand, while the operational and capital per bit expenditures are to be reduced.

To ensure complete coverage of the advances in optical networking, the ICC 2013 Optical Networks and Systems Symposium presents original contributions in, but not limited to, the following topical areas:

- Wavelength division multiplexing, optical time-division and code-division multiplexing
- Optical OFDM systems
- Coding, modulation, and signal processing in optical networks
- Optical switching technologies, devices, and architectures
- Optical cross-connects and add drop multiplexers
- Regeneration, dispersion and nonlinearity management in optical networks
- Optical access networks
  - Fiber-wireless broadband access networks, FMC (Fixed Mobile Convergence)
  - Next-generation passive optical networks
- IP/WDM integration
- Optical network architectures, design and performance evaluation
- Optical network control and management
- Heterogeneous optical networks (multi-layer, multi-domain, multi-technology,...)
- Traffic grooming and traffic engineering
- Multi-granularity switching
- Dynamic traffic management in optical networks
- Optical packet, burst, and flow switching
- Packet optical transport networks

- Multicasting in optical networks
- Performance monitoring and failure localization
- Network resilience: protection and restoration
- Optical physical impairment constrained operation
- Optical networks in support of Grid and cloud computing
- Storage networks
- Free space optics
- Terrestrial and submarine optical networks
- Optical network security
- Optical virtual private networks
- Optical network experiments: demonstrations, test beds and field trials
- Optical translucent networks
- Optical network standardization issues
- Efficient simulation techniques for optical networks
- Emerging applications on the optical Internet backbone
- Short range optical interconnects
- Energy efficient/green optical networks and systems
- Optical Quantum Communications

## Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 16 September 2012 for publication in the IEEE ICC 2013 Conference Proceedings and for oral or poster presentation(s).

All submissions should be written in English with a maximum paper length of Five (5) printed pages (10- point font) including figures without incurring additional page charges (maximum 1 additional page with over length page charge if accepted).

**Standard IEEE Transactions templates for Microsoft Word or LaTeX formats found at**  
<http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html>

**Alternatively you can follow the sample instructions in template.pdf at**  
<http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf>

**Only PDF files will be accepted for the review process and all submissions must be done through EDAS at**  
<http://edas.info/>

## Short biography of co-chairs

**Franco CALLEGATI**, [M '98, SM '11] received his M.Sc. ('89) and Ph.D. ('94) from the University of Bologna, Italy, where he is serving as Associate Professor of Telecommunication Networks. He was also research scientist at the Teletraffic Research Centre of the University of Adelaide, Australia, in 1993, at Fondazione U. Bordoni, (Italy) in 1994 and at the University of Texas at Dallas (USA) in 1998. His research interests are in the field of teletraffic modelling and performance evaluation of telecommunication networks. He has been working in the field of all optical networking with particular reference to network architectures and performance evaluation for optical burst and packet switching and control plane design for network automation. He participated in several research projects funded by the EU, such as ACTS KEOPS, IST DAVID and the networks of excellence e-photon/ONe, e-Photon/ONe+ and BONE, often coordinating workpackages and research activities. He is author of 130 refereed publications with more than 2400 citations and an H-index of 20 according to Google scholar. He served as General Chair for the 14th Conference on Optical Network Design and Modeling in 2011 and as TPC member in all main conferences in the filed such as IEEE Globecom, IEEE ICC, ECOC, ONDM, ICTON etc. He co-edited the book "Enabling Optical Internet with Advanced Network Technologies" published by Springer in 2009.

**Tibor CINKLER** [M'95] has received M.Sc.('94) and Ph.D.('99) degrees from the Budapest University of Technology and Economics (BME), Hungary, where he is currently associate professor at the Department of Telecommunications and Media Informatics (TMIT). His research interests focus on optimisation of routing, traffic engineering, design, configuration, dimensioning and resilience of IP, Ethernet, MPLS, ngSDH, OTN and particularly of heterogeneous GMPLS-controlled WDM-based multilayer networks. He is author of over 210 refereed scientific publications (with over 1100 citations) and of 4 patents. He has been involved in numerous related European and Hungarian projects including ACTS METON and DEMON; COST 266, 291, 293; IP NOBEL I and II and MUSE; NoE e-Photon/ONe, e-Photon/ONe+ and BONE; CELTIC PROMISE and TIGER2; NKFP, GVOP, ETIK; and he has been member of ONDM, DRCN, RNDM, BroadNets, AccessNets, IEEE ICC and Globecom, ECOC, EUNICE, CHINACOM, Networks, WynSys, ICTON, etc. Scientific and Programm Committees. He has been guest editor of a Feature Topic of the IEEE ComMag and reviewer for numerous journals. He has been TPC or General Chair of DRCN 2001, ONDM 2003, Networks 2008 and ICUMT 2011 conferences in Budapest.

**Xavi MASIP**, Ph.D in telecommunications engineering from UPC, is currently associate professor of Computer Science and Communications at the Technical University of Catalunya (UPC). In 1996 Xavi joined the Advanced Broadband Communications Centre (CCABA) at UPC where he participated in many national and European (FP5 LION, FP6 IST NOBEL, NOBEL II, EuQoS, E-NEXT, CONTENT) research projects. In 2007 he co-founded the Advanced Networks Architectures Lab (CRAAX) located at the Vilanova's UPC Campus, where he is currently participating in some EU projects (FP7 ONE and TEFIS), national projects and contracts with the industry (Cisco). His current research interests lie in cloud networking, QoS/QoE provisioning, network management, overlay networks, cross-layer optimization, intra-inter-domain issues and traffic engineering in packet and optical networks. He has authored/co-authored more than 100 refereed contributions in books, journals, conferences and workshops. He is/has also served as Steering Committee member, General Chair, and Program Chair on several international conferences and workshops as well as on the editorial board and as guest editor of several journals.