

Call for Papers for *Optical Networks and Systems Symposium*

Scope and Motivation:

As our society's hunger for ubiquitous broadband access continues to grow, so does the need for high capacity optical systems to move data and support this increase. The technological attributes and limitations of optical systems require unique design approaches to best exploit their qualities. Classical optical networks operate at the core for backbone transport, and new research is always welcome in this arena to increase the capacity and flexibility of these systems. Yet more recently the optical domain has been shown to offer large potential benefits at the access point, with optical wireless networks serving short-range connectivity and passive optical networks supplying RF backhaul. Security, throughput, and spectral and energy efficiencies remain paramount concerns. IEEE Globecom 2015 Optical Network and System Symposium solicits original papers related to the latest research development in these and other relevant areas of optical communication systems and networks.

Main Topics of Interest:

- Elastic optical networks
- Virtualization in optical networks
- Routing and spectrum assignment for optical networks
- Optical translucent networks
- Flexible rate and flexi-grid transmission
- Software defined networks
- Optical network testbeds and experiments
- Cross-layer design of optical networks
- Energy efficient optical networks
- Optical network architectures, design and performance evaluation
- Optical network control and management
- Optical network security
- Optical channel characterization
- Impairment mitigation techniques
- Capacity of optical systems
- Coding, modulation, and signal processing for optical networks
- OFDM for optical systems
- Optical MIMO
- Free space optics
- Visible light communications
- Visible light positioning
- Radio-over-fiber
- Fiber access networks and wireless backhaul
- Inter- and intra- data center networks

Sponsoring Technical Committees:

- Optical Networking
- Transmission, Access and Optical Systems

How to Submit a Paper:

The IEEE Globecom 2015 website provides full instructions on how to submit papers. You will select the desired symposium when submitting. **The paper submission deadline is April 1, 2015. Unlike recent ICC's and Globecom's, this is a hard deadline that will not be extended.**

Symposium Co-Chairs:

- Maite Brandt-Pearce (University of Virginia, USA) mb-p@virginia.edu
- Jean Armstrong (Monash Univ, Australia) jean.armstrong@monash.edu

Biographies



Maïté Brandt-Pearce is a professor in the Charles L. Brown Department of Electrical and Computer Engineering at the University of Virginia. She received her Ph.D. in Electrical Engineering from Rice University in 1993. Her research interests include nonlinear effects in fiber-optics, free-space optical communications, cross-layer design of optical networks subject to physical layer degradations, body area networks, and radar signal processing. Dr. Brandt-Pearce is the recipient of an NSF CAREER Award and an NSF RIA. She is a co-recipient of Best Paper Awards at *ICC 2006* and *GLOBECOM 2012*. She serves on the editorial board of *IEEE Communications Letters*, *IEEE/OSA Journal of Optical Communications and Networks*, and *Springer Photonic Network Communications*. She was co-editor of a book entitled Cross-Layer Design in Optical Networks, Springer Optical Networks Series, 2013. She was the General Chair of the *Asilomar Conference on Signals, Systems & Computers* in 2009 and the Chair of the Optical Wireless Workshop at Globecom 2013.



Jean Armstrong (IEEE M'89-SM'06) received the B.Sc. (First Class Honours) in Electrical Engineering from the University of Edinburgh, Scotland the M.Sc. in Digital Techniques from Heriot-Watt University, Edinburgh, Scotland, and the Ph.D. in Digital Communications from Monash University, Australia. From 1974–1977 she worked as a Design Engineer at Hewlett-Packard Ltd., Scotland. In 1977 she was appointed Lecturer in Electrical Engineering at the University of Melbourne, Australia. Since 1977 she has held a range of academic positions at the University of Melbourne, Monash University and La Trobe University. She is currently a Professor at Monash University.

Professor Armstrong has been the recipient of numerous awards including induction into the Victorian Honour Roll of Women, the Peter Doherty for the best commercialization opportunity in Australia in 2006 (joint winner), Zonta International Amelia Earhart Fellowship and Caroline Haslett Memorial Scholarship. In 2014 she was awarded the IEEE Communications Society Best Tutorial paper award. She is a member of the Australian Research Council (ARC) College of Experts.

She is currently an editor of *IEEE Transaction on Communications* and has previously served as an editor for *IEEE Communications Letters*. She was Workshop Co-chair for *ICC 2014*.

TPC Members (Tentative)

Erik Agrell
Vincent Chan
Milorad Cvijetic
Neda Cvijetic
Ivan Djordjevic
Octavia Dobre
Tarek El-bawab
Costas Georgiades
Ori Gerstel
Roger Green
Nathan Gomes
Harald Haas
Steve Hranilovic
Sander Janssen
Admela Jukan
Joe Kahn
Thomas Little
Muriel Médard
Biswanath Mukherjee
Mohammad Noshad
Yvan Pointurier
Sebastian Randel

George Rouskas
Leslie Rusch
Suresh Subramaniam
Ioannis Tomkos
Vinod Vokkarane
Thomas Wang
Peter Winzer
Elaine Wong
Zhengyuan (Daniel) Xu