

OFC/NFOEC 2011: LEADING THE WAY IN OPTICAL COMMUNICATIONS

BY LYNDSEY BASISTA



Once again, optical communications and networking professionals from around the world will come together for an intense week of networking, high-quality science, and the most comprehensive exhibit in the industry at the Optical Fiber Communication Conference and Exposition (OFC) and the National Fiber Optic Engineers Conference (NFOEC). This year's conference will feature hundreds of peer-reviewed technical and invited presentations, a rump session focusing on "green" networking, a special symposium on computer components and architectures, an exhibit hall with more than 500 leading optical communications companies and so much more. Areas that will be highlighted include: Datacom/Data Centers, FTTx/In-home, Next Generation Data Transfer Technology, Photonic Integration and Wireless Backhaul.

OFC/NFOEC will be held at the Los Angeles Convention Center in Los Angeles, Calif. from March 6 – 10 with the exposition taking place March 8 – 10.

PLENARY SESSION

This year's plenary speakers are leaders at the forefront of the optical communications industry. As always, OFC/NFOEC draws speakers who are industry veterans and their wide range of expertise is certain to be a main attraction at this year's OFC/NFOEC. The event will take place on Tuesday, March 8 from 8 – 11 a.m.

Olivier Baujard, Chief Technology Officer at Deutsche Telekom has had a career spanning all facets of the telecommunications industry. From his time at France Telecom where he held engineering and managerial roles to his 20-year tenure at Alcatel-Lucent, France where he rose to the level of chief executive officer and chairman, Baujard has been a leader in the ever-changing telecommunications industry. In his current position at Deutsche Telekom, Baujard is responsible for the group-wide engineering, deployment and operation of fixed, mobile and carrier infrastructures. During his plenary talk, Baujard will discuss the future data and media-centric world with a particular emphasis on the challenges it presents for network operators. Additionally, he will cover network transformation and strategy and practical examples of how to enable efficient broadband. Baujard will also provide insights about Deutsche Telekom and their vision for the future of wireless services.

Providing an insider's perspective on the advances and developments that optical technologies have on supercomputing is Alan Gara, IBM Fellow and Blue Gene Chief Architect. Gara's talk will discuss the challenges of reaching computing at the exaflop level with a special emphasis on areas where traditional communication solutions will not suffice. Gara has been leading high performance computing architecture and design efforts at IBM Research since 1999. Before then, Gara worked on the Superconductor supercollider (SSC) in Texas and at the Large Hadron Collider (LHC) at CERN. He has been the recipient of many prestigious awards for his supercomputing efforts including two Gordon Bell awards.

With a career spanning more than 30 years in the telecommunications industry, Kristin Rinne, Senior Vice President – Architecture & Planning at AT&T, will share with attendees her outlook on the explosive growth of mobile data and how that growth impacts optical networks including cell site back-

haul. Rinne is responsible for the IT and Network architecture and planning for AT&T, including setting the direction for the Network, BSS/OSS Systems, Services, etc. She is also responsible for the IPTV and

the wireless network infrastructure and device technology vendor selection and first office implementation. Prior to joining AT&T, Rinne served as Cingular's chief technology officer and before that was vice president–Technology Strategy at SBC Wireless and managing director–Operations at Southwestern Bell Mobile Systems.

The plenary session will be held on Tuesday, March 8 from 8 – 11 a.m.

RUMP SESSION

Back for its third year is the always popular Rump Session, an audience-driven discussion designed to be as interactive and dynamic as possible. This year's Rump Session will be devoted to the question: "Is green networking revolutionary?" Organizers are looking for attendees to discuss whether a more energy-efficient network is crucial to continued growth of the Internet or if "green" is merely today's buzzword for something quite familiar to us in the past, whether energy bottlenecks will constrain network growth if more attention is not paid to energy efficiency, and whether consumers and carriers will pay more to go "green," and whether "green" networking will reduce costs in the long run. Any audience member is permitted to participate in the discussion and can use slides to further demonstrate points (no more than two can be accepted). The Rump Session will take place Tuesday, March 8 from 7:30 – 9:30 p.m.

EXHIBIT HALL

The OFC/NFOEC exhibit hall attracts some of the biggest players in the optical communications industry from fiber equipment and components manufacturers to systems and cable vendors, participating companies include industry heavyweights like Juniper Networks, JDSU, Huawei, Finisar, Ciena and Nokia Siemens. The exhibit hall will be the place to see the latest in product demonstrations and innovation while also providing an opportunity for networking with industry leaders.

The exhibit hall is also home to a number of programming events and activities. New this year, EXPO Theater II will have an optical networking focus and will feature events such as the Ethernet Alliance Program (panel discussion on the future of high-speed Ethernet and new storage facilities for efficiency and flexibility), the Green Touch Panel Presentation (panel discussion on when the energy crunch will affect optical networks), and the Optical Internetworking Forum (panel discussions on market requirements for the next generation optical network, considering 400G vs. 1 Terabit speeds; and building blocks for high-speed, on-demand services).

THE OPTICAL BUSINESS FORUM – TUESDAY, MARCH 8

Optical technologies have become integral to the solutions needed to ensure the speed – and capacity – of transactions can keep pace with the needs of customers in the business world. The Optical Business Forum will discuss the latest advances in optical business services with sessions including:

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- Who's Buying Optical Bandwidth Services?
 - The Economics & Business Case for Connecting Data Centers
 - Carrier Ethernet Exchanges
- Additional information can be found online: <http://www.ofcnfoec.org/OBF>

SERVICE PROVIDER SUMMIT – WEDNESDAY, MARCH 9

Also in the exhibit hall is the perennial favorite Service Provider Summit. The Service Provider Summit is geared toward CTOs, network architects, network designers and technologists within the service provider and carrier sector. The program will include a keynote presentation, exhibit time and networking time.

Keynote Presentation: The Financial Industry's Race to Zero Latency and Terabit Networking – Andrew Bach, Senior Vice President and Global Head of Network Services, NYSE Euronext

Panels:

- Evolution to Higher Speed
- What's Going on in Wireless?

Additional information can be found online: http://www.ofcnfoec.org/Service_Provider_Summit

MARKET WATCH – TUESDAY, MARCH 8 – THURSDAY, MARCH 10

This three-day series of panel sessions engages the applications and business communities in the field of optical communications. Presentations and panel discussions feature esteemed guest speakers from industry, research and the investment communities.

Tuesday Panels:

- State of the Optical Industry
- Implications of Converged Wireline Wireless for Network Evolution

Wednesday Panel:

- 100G Ecosystem: Enabling Technology and Economics

Thursday Panels:

- Data Center: Traffic and Technology Drivers
- What's Next for Optical Networking

More information can be found online: http://www.ofcnfoec.org/Market_Watch

SHORT COURSES

Short Courses cover a broad range of topic areas at a variety of educational levels. The courses are taught by highly regarded industry experts on subjects such as 40 Gb/s transmission systems, optical transmission systems, photonic integrated circuits, and ROADM technologies. New topics for 2011 include computercom interconnects and data center networking. More information on the Web: http://www.ofcnfoec.org/Short_Courses/

INVITED SPEAKERS

OFC/NFOEC invited speakers are chosen through a highly selective nominations process to keep attendees at the forefront of optical communications. This year's exciting lineup of speakers will cover various topics in 14 categories, from Optical Network Applications and Services to Transmission Subsystems and Network Elements.

- Regulation Environments around the World: Impacts on Deployments, Fabrice Bourgart, France Telecom, France.
- Google Optical Network Deployment, Vijay Vusirikala, Google, USA.
- Energy-Efficient Optical Access Network Technologies, Junichi Kani, NTT Access Service Systems Labs, Japan.
- Cloud Computing over Telecom Network, Dominique Verchere, Alcatel-Lucent Bell Labs France, France.
- Scaling Networks in Large Data Centers, Donn Lee, Facebook, USA.
- Optical Networking Trends and Evolution, Christoph Glinzner, ADVA Optical Networking, Germany.

A full list of invited speakers is available online: http://www.ofcnfoec.org/Invited_Speakers

WORKSHOPS

Workshops and panel discussions will take place throughout the conference and will cover all topical areas of OFC/NFOEC. Some topics include:

- Beyond 100G, Options and Implications for Today's Networks TJ Xia, Verizon USA; Milorad Cvijetic, NEC and Frank Chang, Vitesse.
- FTTH Around the World: Today and Tomorrow Shoichi Hanatani, Hitachi.
- FTTH and Technical Challenges of Emerging Applications: How Do We Keep Up with the Pace of Digital Evolution David Li, Ligents Photonics.

A full list of workshops and panel discussions is available online at: http://www.ofcnfoec.org/Workshops_and_Panels