Mo1C-1 **13:00-13:15**

O-band Up-to-200GBd PAM Interconnects with a Broadband Packaged EO-equalizer-integrated TFLN Modulator

Paikun Zhu[1], Yuya Yamaguchi[1], Pham Tien Dat[1], Shingo Takano[2], Shotaro Hirata[2], Yu Kataoka[2], Junichiro Ichikawa[2], Tetsuya Fujino[2], Yuki Yoshida[1], Kouichi Akahane[1], Naokatsu Yamamoto[1], Atsushi Kanno[3,1], Tetsuya Kawanishi[4,1]
[1]NICT, Koganei, [2]Sumitomo Osaka Cement Co. Ltd., Funabashi, [3]Nagoya Institute of Technology, [4]Waseda University,

We demonstrate O-band up-to-200GBd and up-to480Gb/s/lane IM-DD links over 1km or 10km SMF with standard PAM formats and low-complexity digital equalization, leveraging a fully-packaged EO-equalizerintegrated TFLN modulator having 100GHz electro-optic bandwidth and ultra-broad optical bandwidth.

Mo1C-2 **13:15-13:30**

Net 211 Gb/s Optical-Amplification-Free Transmission using a 1064 nm Lithium Niobate Mach Zehnder Modulator

Darja Cirjulina[1], Toms Salgals[1], Armands Ostrovskis[1,2], Hadrien Louchet[2], Michael Koenigsmann[2], Fabio Pittalà[2], Benjamin Krüger[2], Lu Zhang[3], Xianbin Yu[3], Richard Schatz[4], Stefan Dahlfort[5], Nicolas Grossard[6], Robert Jahn[2], Kazuo Yamaguchi[2], Markus Gruen[2], Vjaceslavs Bobrovs[1], Xiaodan Pang[1,3], Oskars Ozolins[1]
[1]Riga Technical University, [2]Keysight Technologies Deutschland GmbH, [3]Zhejiang University, [4]RISE Research Institutes of Sweden, [5]Ericsson AB, [6]Exail Photonics

We demonstrate 190 GBaud OOK, 106.25 GBaud PAM4 and 90 GBaud PAM6 transmission using a 1064 nm lithium niobate Mach-Zehnder modulator (MZM). We achieve performance satisfying 6.25% overhead HD-FEC requirements after 100-meter SMF transmission.

Mo1C-3 **13:30-13:45**

Field Demonstration of 320-Gb/s Single-Sideband Coherent Optical Detection for Next-Generation DCIs

Xiaoying Zhang[1,2], Qi Wu[2], Haiqiang Wei[2], Chao Lu[2], Alan Pak Tao Lau[2], Jiahao Huo[1], Kangping Zhong[2]
[1]University of Science and Technology Beijing, [2]The Hong Kong Polytechnic University, Hong Kong

In this paper, we successfully demonstrated a field transmission of 320Gbit/s SCM-16QAM/PAM-4 signal over 109km deployed link using single-sideband coherent optical detection technique for fine-speed granularity DCIs application.

Mo1C-4 **13:45-14:00**

First Experimental Demonstration of 4-core MCF Transmission Using 800G FR4 Optics and MMC Connectors

Jason Hurley, Doug Butler, Xin Chen, Kevin Bennett, Clifford Sutton, Michael Famularo, Sergejs Makovejs
Corning Incorporated

We experimentally show 800G FR4 transmission over MCF up to 3.35 km, achieving BER levels <10-8. We used 4-core MCF MMC connectors to demonstrate the practicality of using MCF-based solution in real-world deployments.

Mo1C-5 **Invited** **14:00-14:30**

Hollow Core Fiber based Data Center Interconnection

Songnian Fu, Cong Zhang, Yuwen Qin
Guangdong University of Technology

To satisfy both capacity and latency requirements of data-center interconnection (DCI), we experimentally demonstrate hollow-core fiber (HCF)-based DCI schemes. The results validate HCF superiority in high-capacity, lowlatency DCI applications.