Room F (Sicily), 2F — Chair: Yuya Yamaguchi (NICT)

Tu1F — June 30 (Tue), 2026

High-Speed Modulators II & Wavelength Conversion — 08:30-10:00

Tu1F-1 **Invited** **08:30-09:00**

High-Capacity Enabling C+L-Band InP-Based Coherent Driver Modulators

Josuke Ozaki, Yoshihiro Ogiso, Mitsuteru Ishikawa
NTT Innovative Devices Corporation

We developed a C+L-band operable InP-based coherent driver modulator with over 90-GHz electro-optic bandwidth and demonstrated 1.8 Tbps per wavelength single-carrier transmission, enabling next-generation high-capacity optical communication systems across the C+L band.

Tu1F-2 **09:00-09:15**

Silicon Photonics Microwave Receiver based on Electro-Absorption Modulator Integrated with Slanted Mirror

Jian-Hua Lin[1], Shou-Ming Chen[1,2], Bo-Hong Chen[1,2], Rih-You Chen[1,2], Yi-Jen Chiu[1]
[1]National Sun Yat-Sen University, [2]LandMark Optoelectronics Corporation

Photonic microwave receiver based on slanted mirrorintegrated InGaAsP electro-absorption modulator (EAM) has been demonstrated on a Si photonics template, allowing optical coupling from underneath Si waveguide and enabling microwave mixing function.

Tu1F-3 **09:15-09:30**

Lossless Bidirectional Post-Fabrication Trimming of Silicon Ring Modulators

Haozhe Sun, Yating Wu, Tao Chu
Zhejiang University

We demonstrate lossless bidirectional trimming of silicon ring modulators via hybrid thermal annealing. Permanent resonance shifts are achieved without performance degradation, providing a robust calibration solution for high-density, high-speed optical interconnects.

Tu1F-4 **09:30-09:45**

Broadband Wavelength Conversion based on Chalcogenide Waveguides

Ling Luo, Shulin Deng, Nan Li, Yongguang Xiao, Qingming Chen, Zhaohui Li
Sun Yat-Sen University

This paper presents a broadband wavelength converter based on chalcogenide waveguides. Using 1550 nm continuous-wave (CW) pumping, we achieve a 170 nm 3-dB conversion bandwidth covering the entire S+C+L bands in a 9.23 cm waveguide.

Tu1F-5 **09:45-10:00**

Parallel Two-Step Parameter Control for Automatic 50-GHz Double-Frequency-Spaced Flat Comb Generation Using 25-GHz In-Phase/Quadrature Modulator

Koshiro Hashihara, Shun Harada, Tomoya Suzuki, Koushi Chinone, Takahide Sakamoto
Tokyo Metropolitan University

We demonstrate parallel two-step parameter control (P-TSPC) method, which automatically guides to optimal condition for double-frequency-spaced flat optical comb generation using in-phase/quadrature modulator (IQM). 50-GHz-spaced flat comb is experimentally generated using 25-GHz IQM.