

Room D (Capri), 2F

Chair: Joonyoung Kim (imec)

Mo2D

June 29 (Mon), 2026

LiDAR and Wireless Optical Communications

14:45-16:15

Mo2D-1

14:45-15:00

Real-Time 162 Gbit/s Photonic THz Transmission at 300 GHz Using a Novel Orthomode Transducer

Liga Bai¹, Zhe Ding¹, Lu Zhang¹, Zhidong Lyu¹, Zian Wang¹, Oskars Ozolins³, Xiaodan Pang^{1,3}, Changming Zhang², Shilie Zheng¹, Xianbin Yu^{1,3}

¹Zhejiang University, ²Zhejiang Lab, ³Riga Technical University

Mo2D-2

15:00-15:15

Record 221 Gb/s Dual Polarization THz Wireless Transmission Over 500 m Using PCS-64QAM at 300 GHz

In-Ho Baek¹, Oliver Stiewe¹, Robert Elschner¹, Markus Rösch², Axel Tessmann², Markus Nölle³, Lutz Molle³, Colja Schubert¹, Ronald Freund^{1,4}

¹Heinrich Hertz Institute (HHI), ²Fraunhofer-Institut für Angewandte Festkörperphysik, ³Hochschule für Technik und Wirtschaft Berlin, ⁴Technische Universität Berlin

Mo2D-3

15:15-15:30

Investigation of Scalability for Multi-hop Inter-Satellite Links using All-optical Relays

Satoshi Shinada, Shoichiro Oda, Hideaki Kotake, Toshimasa Umezawa, Yusuke Hirota, Hideaki Furukawa
National Institute of Information and Communications Technology

Mo2D-4

15:30-15:45

Intelligent Reflecting Surface-Assisted Pointing, Acquisition, and Tracking Algorithm for Cellular FSO Communication

Gihong Park, Hoon Kim

Korea Advanced Institute of Science and Technology

Mo2D-5 **Invited**

15:45-16:15

FMCW LiDAR Architectures: Overview, Trade-offs, and Design Selection

Javier Pérez Santacruz¹, Jac Romme², Esteban Venialgo Araujo², Joonyoung Kim¹, Mathias Prost¹, Ruud M. Oldenbeuving³, Marcus S. Dahlem¹, Dongjae Shin²

¹imec, ²imec-NL Holst Centre