

IEEE 2021 ICC Workshop on Orbital Angular Momentum Transmission

Friday, 18 June 2021 9:00-12:20 (Eastern Daylight Time)

9:00-9:10	Greetings & Welcomes
9:10-9:30	Keynote Speech 1 (Speaker Prof. Chao Zhang)
9:30-9:50	Keynote Speech 2 (Speaker Dr. Doohwan Lee)
9:50-9:55	Group Photograph
	Session 1: Session Chair Dr. Doohwan Lee
9:55-10:07	Ultra Narrow Band Transmission System with Orbital Angular Momentum <i>Qiuli WU, Chao ZHANG</i> (Tsinghua University, China)
10:07-10:19	Multiple OAM Signal Recovery Using Pseudo-Doppler Technique with Two mm-Wave Receivers <i>Marek Klemes, Andrei Buliga, Andrei Buliga</i> (Huawei Technologies Canada Co. Ltd., Canada), <i>Michael Schwartzman</i> (CAElliott, Inc., Canada), <i>Soulideth Thirakoune, Tan Huy Ho, Tan Huy Ho, Tan Huv Ho</i> (Huawei Technologies Canada Co. Ltd., Canada)
10:19-10:31	Capacity Analysis of OAM-MIMO System in Corridor Multipath Environments <i>Xi Liao, Changwen He, Yang Wang</i> (Chongqing University of Posts and Telecommunications, China)
10:31-10:43	Improving Multiple-User Capacity through Downlink NOMA in OAM Systems <i>Mengnan Jian, Yijian Chen, Guanghui Yu</i> (ZTE Corporation, China)
10:43-10:55	A Fan Ring Resonator Antenna For Generating High Gain PSOAM Mode-Group With Ultrahigh Equivalent Order <i>Zelin Zhu, Xiaowen Xiong, Yuqi Chen, Shilie Zheng, Xianmin Zhang</i> (Zhejiang University, China)
10:55-11:07	Efficient Inter-mode Interference Cancellation Method for OAM Multiplexing in the Presence of Beam Axis Misalignment <i>Shuhei SAITO, Yuki ITO, Hirofumi SUGANUMA</i> (Waseda University, Japan), <i>Kayo OGAWA</i> (Japan Women's University, Japan), <i>Fumiaki MAEHARA</i> (Fumiaki MAEHARA)
11:07-11:15	Networking Break

Session 2: Session Chair Prof. Chao Zhang	
11:15-11:27	Field Experiment of 117 Gbit/s Wireless Transmission Using OAM Multiplexing at a Distance of 200 m on 40 GHz Band <i>Yasunori Yagi, Hirofumi Sasaki, Tomoki Semoto, Tomoya Kageyama, Takayuki Yamada, Jun Mashino, Doohwan Lee</i> (NTT Corporation, Japan)
11:27-11:39	Modal Purity and LG Coupling of an OAM Beam Reflected by a Rough Surface for NLoS THz Links <i>Xinzhou Su, Nanzhe Hu, Amir Minoofar, Hao Song, Huibin Zhou, Zhe Zhao, Runzhou Zhang, Kai Pang, Cong Liu, Kaiheng Zou, Haoqian Song</i> (University of Southern California, USA), <i>Brittany Lynn</i> (Naval Information Warfare Center Pacific, USA), <i>Shlomo Zach, Moshe Tur</i> (Tel Aviv University, Isreal), <i>Andreas F. Molisch</i> (University of Southern California, USA), <i>Hirofumi Sasaki, Doohwan Lee</i> (NTT Corporation, Japan), <i>Alan E. Willner</i> (University of Southern California, USA)
11:39-11:51	Higher-Order Spatial Modes in Turbulence: Alternatives to Orbital Angular Momentum <i>Mitchell A. Cox</i> (University of the Witwatersrand, South Africa), <i>Abderrahmen Trichili, Boon S. Ooi, Mohamed-Slim Alouinix</i> (Abderrahmen Trichilix, Boon S. Ooix, and Mohamed-Slim Alouinix, Kingdom of Saudi Arabia)
11:51-12:03	Signal Processing of Multi-Mode-Multi-Spatial (MOMS) in Line-of-Sight Channels <i>Yi LV, Rui NI, Qian ZHU</i> (Huawei, China) <i>Merouane DEBBAH</i> (Huawei France Research Center, France)
12:03-12:15	An OAM Mode Measurement Method by Rotation Angle Estimation <i>Quanqing Qiao, Shengmei Zhao and Le Wang</i> (Nanjing University of Posts & Telecom., China)
12:15-12:20	Closing Speech (Speaker Dr. Doohwan Lee)