

Time (Tokyo)	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Event hall	Event hall Stage
Monday, October 27									
14:00- 17:00			WS1: Workshop: By Prof. Dongho Kim	WS2: Workshop: By Prof. Fan Yang	WS3: Workshop:By Prof. Naoki Kita	WS4: Workshop:By Mr. Su-Wei Chang			
Tuesday, October 28									
09:00- 09:30	2A1: Opening Ceremony								
09:30- 10:10	2A2: Plenary Talk 1 by Prof. Sato								
10:10- 10:50	2A3: Plenary Talk 2 by Prof. Liu								
11:10- 11:50	2A4: Plenary Talk 3: By Prof. Park								
11:50- 12:30	2A5: Plenary Talk 4: By Prof. Quevedo- Teruel								
12:45- 13:30									TS1: Technical Seminar 1:

								Seminar 3: Rohde & Schwarz Japan
13:40-15:10							Pos2: Poster Session 2	
15:10-15:20								SDC2: Student Design Contest: Category B (Flexible Antenna Design)
15:40-17:20	3A4: [OS04] Antenna Measurement Techniques Association (AMTA)	3B4: [OS19] Innovative antenna systems for the realization of integrated wireless technology	3C4: [OS22] Recent Advancement of Microwave, Millimeter Wave, and Terahertz Wave Circuits and Applications	3D4: [OS10] Advanced Techniques for Expanding Millimeter-Wave/Terahertz Network Coverage	3E4: [OS16] Advanced Antenna and RF Technologies for Satellite Communications and Remote Sensing (UNIST RRC Special Session)	3F4: [OS23] IEEE AP-S and ISAP 2025 Young Professional Special Session		
17:20-17:25								
17:25-17:40								

Thursday, October 30

09:00-10:40	4A1: Reflector, Reflectarray and Lens Antennas	4B1: [OS01] Advanced Antenna and EMC Measurement Technologies for Microwave and Millimeter Wave Systems	4C1: [OS09] Recent Advances and Applications of Metamaterials and Metasurfaces	4D1: [OS03] Underwater Wireless Technology Using Electromagnetic Waves	4E1: Millimeter-wave and Terahertz Antennas I	4F1: Part1: Technical session [OS25] Highlighting Research Achievements Beyond Gender		
11:00-12:40	4A2: Antenna Theory and Design	4B2: [OS01] Advanced Antenna and EMC Measurement Technologies	4C2: [OS26] Electromagnetic field analysis and industry applications	4D2: [OS03] Underwater Wireless Technology Using Electromagnetic	4E2: [OS12] Small and Low-Profile Antennas	4F2: Part2: D&I session "Sharing Ideas on Gender Innovation"		

		for Microwave and Millimeter Wave Systems		Waves					
12:40- 13:10									TS4: Technical Seminar 4: Keysight technologies
13:10- 13:40									TS5: Technical Seminar 5: Optenni Ltd
13:40- 15:20								Pos3: Poster Session 3	
15:40- 17:20	4A4: [OS34] Yagi-Uda Antenna 100th Anniversary of Birth Special Session	4B4: Wireless Power Transfer Technologies	4C4: Developments in Periodic Structures and Metasurfaces	4D4: ML and AI for AP Applications	4E4: [OS31] Evolution of Radio Technology Shaping 6G in Japan	4F4: [OS21] Analysis and Measurement for Reconfigurable Intelligent Surfaces (RIS)			

Friday, October 31

09:00- 10:40	5A1: Smart and Reconfigurable Antennas	5B1: [OS06] Propagation and Modeling in ITU-R SG3	5C1: [OS24] Electromagnetic field theory	5D1: [OS18] Indoor and Outdoor Propagation	5E1: Small antenna and antenna measurement	5F1: [OS28] Advanced Techniques for EMC/EMI			
11:00- 12:40	5A2: AP Related Topics for B5G and 6G	5B2: Metasurface technology	5C2: [OS02] Frontiers of Computational Electromagnetics	5D2: [OS30] Enhancing Radio Propagation Technologies Driven by Machine Learning	5E2: Reflector and Reflectarray Antennas	5F2: [OS28] Advanced Techniques for EMC/EMI			

14:00-15:40	5A3: <i>RFID and Its Applications</i>	5B3: <i>Planar / Printed antenna and Arrays</i>	5C3: <i>Future Technologies for EM Waves and Circuits</i>	5D3: <i>[OS17] Simulation Analysis of Propagation</i>	5E3: <i>Millimeter wave and Terahertz antenna II</i>	5F3: <i>[OS07] HAPS mobile communication systems</i>			
15:40-16:00									

Monday, October 27

Monday, October 27 14:00 - 17:00

WS1: Workshop: By Prof. Dongho Kim

Speaker: Prof. Dr. Dongho Kim

Fundamentals of Artificial Electromagnetic Surfaces and Their Applications to Next-Generation and Future Antenna Technologies

Room C

WS2: Workshop: By Prof. Fan Yang

Speaker: Prof. Fan Yang (Tsinghua University)

Surface Electromagnetics: Theory and Engineering

Room D

WS3: Workshop:By Prof. Naoki Kita

Speaker: Prof. Naoki Kita (Tokyo Denki University)

Radio Wave Propagation Models for Wireless Zone Design in High Frequency Bands - From Microwave to Millimeter Wave Bands -

Room E

WS4: Workshop:By Mr. Su-Wei Chang

Speaker:Mr. Su-Wei Chang (TMY Technology Inc.)

Advancing Connectivity: Phased Array Antennas and Beamforming Technologies for Multi-Orbit Satellite and 5G Communications

Room F

Monday, October 27

Monday, October 27 14:00 - 17:00

WS1: Workshop: By Prof. Dongho Kim

Speaker: Prof. Dr. Dongho Kim

Fundamentals of Artificial Electromagnetic Surfaces and Their Applications to Next-Generation and Future Antenna Technologies

Room C

WS2: Workshop: By Prof. Fan Yang

Speaker: Prof. Fan Yang (Tsinghua University)

Surface Electromagnetics: Theory and Engineering

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Speaker: Prof. Naoki Kita (Tokyo Denki University)

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WS4: Workshop: By Mr. Su-Wei Chang

Speaker: Mr. Su-Wei Chang (TMY Technology Inc.)

Advancing Connectivity: Phased Array Antennas and Beamforming Technologies for Multi-Orbit Satellite and 5G Communications

Room F

Tuesday, October 28

Tuesday, October 28 9:00 - 9:30

2A1: Opening Ceremony

Room A

Tuesday, October 28 9:30 - 10:10

2A2: Plenary Talk 1 by Prof. Sato

Speaker: Motoyuki Sato, Tohoku University

Title: Ground Penetrating Radar for Humanitarian Demining in Ukraine

Room A

Tuesday, October 28 10:10 - 10:50

2A3: Plenary Talk 2 by Prof. Liu

Speaker: Qing Huo Liu, Eastern Institute of Tech

Title: Multiscale Computational Electromagnetics for Antennas and Propagation

Room A

Tuesday, October 28 11:10 - 11:50

2A4: Plenary Talk 3: By Prof. Park

Speaker: Seong-Ook Park, KAIST

Title: A review of Antenna System Technologies for Small Satellite

Room A

Tuesday, October 28 11:50 - 12:30

2A5: Plenary Talk 4: By Prof. Quevedo-Teruel

Speaker: Oscar Quevedo-Teruel, KTH Royal Institute of Technology

Title: Physical Optics for Modelling Antennas: Merging Accuracy with Simplicit

Room A

Tuesday, October 28 12:45 - 13:30

TS1: Technical Seminar 1: Microwave Factory

Tuesday, October 28 13:30 - 15:10

Pos1: Poster Session 1

Room: Event hall

Pos1.1 A Low-Profile Shared-Aperture Antenna Array with Self-Descattering and Self-Decoupling Capabilities

Yi He (University of Technology Sydney (UTS), Australia & University of Technology Sydney, Australia); Shaodong Wang (Xidian University, China); Gengming Wei and Can Ding (University of Technology Sydney (UTS), Australia); Y. Jay Guo (University of Technology Sydney, Australia)

Pos1.2 Accuracy Enhanced TDOA-Based Ablation Zone Imaging for Microwave Breast Cancer Treatment

Satoru Nishimura and Shouhei Kidera (University of Electro-Communications, Japan)

Pos1.3 Survivor Detection Method in Low-Visibility Indoor Environment with Millimeter Wave Radar Imaging and Analysis

Toshiki Tateoka (The University of Electro-Communications, Japan); Shouhei Kidera (University of Electro-Communications, Japan)

Pos1.4 A Full-Metal, Electrically Small, Linearly Polarized Huygens Dipole Antenna with High Polarization Purity and High Efficiency

Jiongjian Fang and Wei Lin (The Hong Kong Polytechnic University, Hong Kong)

Pos1.5 A Wideband Millimeter-Wave HDI-Based Antenna-in-Package Design and Its GSG-Probe-Free Measurement

Yuxin Zhang and Hang Wong (City University of Hong Kong, Hong Kong); Qingsha Cheng (Southern University of Science and Technology, Shenzhen, China)

Pos1.6 Grating Lobe Suppression with Mixed Skewed and Rectangular Grids for Single-Layer 15/28-GHz Band Dual-Beam Reflectarray Antenna

Keita Hamada, Masataka Ohira and Hiroyuki Deguchi (Doshisha University, Japan)

Pos1.7 Numerical Analysis of Single-Patch Beam-Steering Antenna with Orthogonal Monopulse Excitation

Syoichi Soejima, Eisuke Nishiyama and Ichihiko Toyoda (Saga University, Japan)

Pos1.8 Design of a Dual-Polarized Crossing Perpendicular-Corporate-Feed Waveguide 2×2-Slot Sub-Array Antenna

Hinata Ishikawa, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan)

Pos1.9 Improvement of anti-Eavesdropping Performance of Spatially Selective Modulation System Using Artificial Noise Transmission

Keita Shigaki, Sasuke Daikoku, Hisato Iwai and Shinsuke Ibi (Doshisha University, Japan)

Pos1.10 Ray-Tracing Physical-Optics Model for Dielectric Lens Antennas

Núria Flores-Espinosa and Pilar Castillo-Tapia (KTH Royal Institute of Technology, Sweden); Francisco Mesa (University of Seville, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)

Pos1.11 Unconditionally Stable Non-Uniform Grids LCDI-FDTD Method Including Lumped Elements

Guilin Hou (Anhui University, China); Guoda Xie (Anhui University, unknown); Chao Wang, Hang Yu, Yingsong Li and Zhixiang Huang (Anhui University, China)

Pos1.12 RCS and Angular Width of Two Trihedral Corner Reflectors Separated by a Distance

Linran Xie (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

Pos1.13 High-Resolution Imaging for Millimeter-Wave Automotive Radar with Doppler Velocity Decomposition and Synthetic Aperture Process

Keidai Ishioka (The University of Electro-Communications, Japan); Shouhei Kidera (University of Electro-Communications, Japan)

Pos1.14 COSY Antenna Using Series Resonant Circuit for 2.4 GHz/5 GHz WLAN Applications

Suguru Kojima (Panasonic Corporation, Japan)

Pos1.15 Improvement of Horn Antenna Gain Measurement System Up to 40 GHz Using Single-Antenna Method

Yuanfeng She (National Institute of Advanced Industrial Science and Technology, Japan); Michitaka Ameya (AIST, Japan)

Pos1.16 Double-Folded SIW Cavity-Backed Self-Isolated Four-Port Filtering MIMO Antenna

Xin Zhou and Kam-weng Tam (University of Macau, Macao); Gang Zhang (Nanjing Normal University, China); Qiwei Chen and Junxiao Liu (Macao Wujing Technology Co Ltd, Macao); Hou-Pan Sio (Macao Science Center, Macao)

Pos1.17 Adaptive Radar Cross Section Reduction via Active Nulling Using LCMV Beamforming

Jaehyeon Shin and Hyunsoo Lee (Kumoh National Institute of Technology, Korea (South)); Youngwan Kim (LIG Nex1, Korea (South)); Tae Heung Lim (Kumoh National Institute of Technology, Korea (South))

Pos1.18 A Low-Loss 8 GHz CMOS SPDT Switch for Upper-Mid Band Beamforming Applications

Hui Dong Lee (Electronics and Telecommunications Research Institute, Korea (South)); Sunwoo Kong (Electronics and Telecommunications Research Institute, Korea (South)); Seunghun Wang (Electronics and Telecommunications Research Institute, Korea (South)); Bonghyuk Park (ETRI, Korea (South))

Pos1.19 Dual-Mode Independent Beam Steering Using Radiation-Selective Boundaries in a Unified Identical Aperture Phased Array

Jeonghyo Lee (POSTECH, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))

Pos1.20 A 3D-Printed Planar Luneburg Lens with Beam Enhancement via Axially Added Refractive Index Tapering

Nannan Wang (Harbin Institute of Technology, China); Yizhi Zhang (Harbin Institute of Technology, China); Pengcheng Wang and Jingjing Liu (Harbin Institute of Technology, China)

Pos1.21 Gain Enhancement of a Waveguide-Fed Wideband Sidewall-Shorted Microstrip Antenna for D-Band Applications

Ta-Yeh Lin, Shuw-Guann Lin, Yin-Cheng Chang, Chaoping Hsieh and Da-Chiang Chang (Taiwan Semiconductor Research Institute, National Institutes of Applied Research, Taiwan)

Pos1.22 Basic Study on a Novel Mechanical Beam Steering Low-Profile System with a Transmitarray Antenna

Gen Nakayama and Takashi Tomura (Institute of Science Tokyo, Japan)

Pos1.23 A Low-Profile Wideband Magnetolectric Dipole Antenna Using Microstrip Feed

Haonan Zhang, Qingxin Guo, Huachen Zhao and Zengrui Li (Communication University of China, China)

Pos1.24 Wideband Polarization Converter Implemented with Miniaturized Metasurface

Cho Hilary Scott Nkimbeng, Heesu Wang and Ikmo Park (Ajou University, Korea (South))

Pos1.25 Polarization Conversion Metasurface with a Reflection Window and Dual-Band RCS Reduction

Huachen Zhao, Zengrui Li, Haonan Zhang, Qingxin Guo, Jinbo Liu and Yajin Wang (Communication University of China, China)

Pos1.26 Non-Ground-Reliant Redirecting Metasurfaces with Endfire Wave Bending

Mina Feizi, Shu-Lin Chen, Peiyuan Qin and Y. Jay Guo (University of Technology Sydney, Australia)

Pos1.27 High-Performance Antenna for Ear-Mounted Devices

Ryoya Kishi and Toru Fukasawa (Kanazawa Institute of Technology, Japan)

Pos1.28 Accurate Estimation of Tree Attenuation Based on Quantification of Leaf Area and Branch Volume

Yoshiki Nakanishi, Shigeo Gotoh, Hisato Iwai and Shinsuke Ibi (Doshisha University, Japan)

Pos1.29 Experimental Study of V2X Communication Area Construction in THz Band Using Cosecant Beam Pattern

Toshiki Hozen, Ayumu Yabuki and Kazuma Tomimoto (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan)

Pos1.30 Robust Channel Reconstruction for Electronic Phantoms Under Radar Misalignment

Haruki Shibasaki, Yuto Ozawa, Kentaro Murata and Naoki Honma (Iwate University, Japan)

Pos1.31 Over-the-Air Testing with Reconfigurable Electronic Phantom for Wideband Radars

Motoki Narusawa, Kentaro Murata and Naoki Honma (Iwate University, Japan)

Pos1.32 Ka-Band Broadband, RCS-Reduced Transmitarray Using Polarization Converter Without Resistors

Po-Yu Chan, Wei-Lun Lu and Tzyh-Ghuang Ma (National Taiwan University of Science and Technology, Taiwan)

Pos1.33 Performance Analysis of an I-Shaped Slots Array Antenna for mmWave 5G Communications

Moynul Hasan Akash and Masato Saito (University of the Ryukyus, Japan)

Pos1.34 Dual-Polarized Tapered Slot Antenna for Multi-Probe Measurement Systems

Genki Sato, Koichi Ichige and Makoto Sano (Yokohama National University, Japan)

Pos1.35 Beamforming Limitations for Distributed Antenna Arrays Under Platform Positioning Deviations

Giulio Orlando (Kongsberg NanoAvionics, UAB, Lithuania); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Thomas Delamotte (Bundeswehr University Munich, Germany); Hervé Legay (Thalès Alenia Space, France)

Pos1.36 Wideband Dual-Polarized Large-Curvature Elliptic Cylindrical Conformal Phase Array

Xiangbo Wang, Wei Hu, Zhan Chen and Tao Hong (Xidian University, China)

Pos1.37 Active Planar Antenna Design for CHARTS Array

Albert Wai Kit Lau, Victoria Allder, Sophia Da Costa, Sean V Hum, Keith Vanderlinde and Juan Mena-Parra (University of Toronto, Canada)

Pos1.38 Design of a Dual-Band and Wideband Dual-Ring Microstrip Antenna Fed by an L-Probe

Yuta Ozaki, Kenta Kariya and Yuichi Kimura (Saitama University, Japan)

Pos1.39 Design of a Single-Layer Dual-Polarized Dual-Band and Wideband Microstrip Antenna Fed by Two L-Probes with Separated Outer Elements

Tomoki Matsushima and Yuichi Kimura (Saitama University, Japan)

Pos1.40 Design of a Single-Layer Dual-Polarized Dual-Band and Wideband Ring Microstrip Antenna Fed by Two L-Probes with an Inner Folded Patch

Terutoshi Goto and Yuichi Kimura (Saitama University, Japan)

Pos1.41 High-Gain Design of Split-Beam Multilayer Antenna for Shipborne Applications

Min Cheol Paek (National Korea Maritime & Ocean University, Korea (South)); You Seok Yeoh (Korea Maritime & Ocean University, Korea (South)); Seong Been Jang and SeungJun Kim (National Korea Maritime & Ocean University, Korea (South)); Kyeong-sik Min (Korea Maritime and Ocean University, Korea

(South))

Pos1.42 A Circular Polarized Waveguide Antenna for OTA Production Testing in 5G-FR2 Band

Jose Moreira (Advantest Europe GmbH, Germany); Sergey Churkin (Radiogigabit, Armenia)

Pos1.43 An Ultra-Low Profile Ultra-Wideband Dual-Polarization 1-D Tightly Coupled Array Antenna

Zhiya Zhang, Tong Wu and Shaoli Zuo (Xi'dian University, China)

Pos1.44 A Dual-Band Dual-Polarized Antenna Array with Improved Front-to-Back Ratio

Chao Wu (Harbin Institute of Technology, China); Shuang Qiu (University of Macau, China); Jinghui Qiu (Harbin Institute of Technology, China); Leonid Dubrov (China)

Pos1.45 Compact Multiband Antenna Using Slotted Metal Case and Internal Folded Dipole Element

Phung Quang Quan (Le Quy Don Technical University, Vietnam); Atsushi Takei, Mari Takeda and Atsushi Yamamoto (Panasonic Corporation, Japan); Tetsuya Hishikawa (Panasonic, Japan); Hiroshi Sato (Panasonic Corporation, Japan); Yoshio Koyanagi (Panasonic, Japan); Hiroshi Hashiguchi (National Defense Academy, Japan); Hisashi Morishita (Japan)

Pos1.46 Flexible Metasurface-Enabled Broadband Circularly Polarized Antenna for GPS Applications

Zhirui Li and Mohammad Ameen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

Pos1.47 On-Vehicle Integration and Experimental Validation of a Glass-Embedded Antenna

Soomin Kim, Dongseop Lee and Bumhyun Kim (Pohang University of Science and Technology (POSTECH), Korea (South)); Sangjin Park, Seongdae Cho, Kyungmin Kim and Minkyung Kim (KCC Glass Corporation, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))

Pos1.48 A Low-Profile Filtering Transmissive Metasurface Based on a Novel Topology

Ruihua Liu and Xue Ren (Shenzhen University, China)

Pos1.49 An Electrically Small Dual-Band Circularly Polarized Antenna with a High Aspect Ratio

Phuong Linh Hoang and Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); Anthony Grbic (University of Michigan, Ann Arbor, USA)

Pos1.50 Integrated Sensing and Communication in the Terahertz Band Enabled by Photomixing Using a High-Speed Wavelength Tunable Laser

Ryota Kaide, Shenghong Ye, Yiqing Wang and Yuya Mikami (Kyushu University, Japan); Yuta Ueda (NTT, Japan); Kazutoshi Kato (Kyushu University, Japan)

Pos1.51 Lossy Compression Technique for Synthetic Aperture Radar Data Using Sparse Reconstruction

Masanori Gocho (National Institute of Information and Communications Technology, Japan)

Pos1.52 Salinity-Driven Variability of Ground-Wave Propagation in the Western Baltic Sea

Niklas Hehenkamp, Filippo Giacomo Rizzi and Lars Grundhöfer (Deutsches Zentrum Für Luft- Und Raumfahrt, Germany); Stefan Gewies (German Aerospace Center, Germany)

Pos1.53 A Method for Detecting Sporadic E-Layer Propagation at Single Observation Point Based on Frequency Analysis of VHF Signal Strength

Naruhiko Ueda, Makoto Kobayashi, Shunpei Yamaguchi, Koichi Shin and Masahiro Nishi (Hiroshima City University, Japan)

Pos1.54 On the DOA Estimation Accuracy of E-Plane and H-Plane Array Antennas

Ryo Ijichi, Ryuichiro Kataoka and Koichi Ichige (Yokohama National University, Japan); Shota Kunikata, Hiroshi Nishida and Takahiro Kinoshita (Murata

Pos1.55 A Novel Magnetic Coupler Tracking the Maximum Coupling Coefficient for Wireless Power Transfer

Sihui Hao, Chunyan Xiao, Hao Wang and Bohan Yang (Beihang University, China)

Pos1.56 A Simple Method for Measuring Radiated Emission from Wire-Harnesses Using Transfer Functions

Tsubasa Suto (Tokyo Metropolitan Industrial Technology Research Institute); Takuji Arima (Tokyo University of Agriculture and Technology, Japan); Teru Obata and Hiroyasu Sano (Tokyo Metropolitan Industrial Technology Research Institute, Japan)

Pos1.57 Evaluation of GPS-Based Synchronization for Distributed Antenna Networks

Koki Hirai and Minseok Kim (Niigata University, Japan)

Pos1.58 Preliminary Study on Aircraft Signal Distortion in Airport Area for Localization

Lizardo A. Arias (Institute of Science Tokyo, Japan); Junichi Naganawa (Electronic Navigation Research Institute, Japan); Nopphon Keerativoranan and Jun-ichi Takada (Institute of Science Tokyo, Japan)

Pos1.59 Performance Improvement of Device-Free Localization Using Bayesian Optimization

Gesi Teng (Nigata University, Japan); Minseok Kim (Niigata University, Japan)

Pos1.60 Three-Dimensional Inverse Scattering Based Quantitative Imaging for Microwave Non-Destructive Road Inspection

Hiroshi Inoue (The University of Electro-Communications, Japan); Shouhei Kidera (University of Electro-Communications, Japan)

Pos1.61 Ku-Band Reconfigurable Planar Bandpass Filter with High Frequency Selectivity Based on Two Sideband Transmission Zeros

Hong Bin Wang (UESTC, China); XinYang Ling (University of Electronic Science and Technology of China, China); Yu Jian Cheng (UESTC, China)

Pos1.62 A Composite Antenna Consisting of an Omni-Directional Top-Loaded Antenna and a Bidirectional Loop Array

Takashi Yanagi, Yasuhiro Nishioka, Satoshi Yamaguchi and Toru Takahashi (Mitsubishi Electric Corporation, Japan)

Pos1.63 Equivalent Simulation of Passive Millimeter-Wave Imaging in Observation Range Domain

Yan Fang and Yayun Cheng (Harbin Institute of Technology, China); Huimin Xiong (Harbin Institute of Technology University, China & Harbin Institute of Technology, China); Jinghui Qiu (Harbin Institute of Technology, China)

Pos1.64 Impact of Irregular Array Layouts on Beamforming Metrics in ZF Massive MIMO

Noud Kanters (University of Twente, The Netherlands); Andrés Alayón Glazunov (Linköping University, Sweden)

Pos1.65 An Stretchable Receiving Coils with Integrated Flexible Elements

Bo-Wei Wang, Chia-Hung Chang, Chien-Chung Shih, Shi-Ting Lu and Yi-Wei Xu (National Yunlin University of Science and Technology, Taiwan)

Pos1.66 Fundamental Study on Electromagnetic Plane Wave Scattering by a Thick Slit and a Rectangular Trough on the Back Side of a Conducting Plate

Ryoichi Sato (Niigata University, Japan); Hiroshi Shirai (Chuo University, Japan)

Pos1.67 A 3.5-GHz CMOS Power Amplifier for Wireless Communication Applications

Yu-Hsin Chang and Yi-Cheng Tong (National Formosa University, Taiwan)

Pos1.68 Slotted Waveguide Ka-Band Antenna Fed by a Novel Double Ridge to Single Ridge E-Plane T-Junction

Alicja Schreiber (German Aerospace Center, Germany)

Pos1.69 Design of Adjacent Metal Structure for Loop-Shaped Antennas

Yukio Kaneko, Takashi Kawamura and Takanori Okamura (Sony Corporation, Japan)

Pos1.70 Theoretical Proof of the Equivalence of LLS-2 and LLS-3 in TOA Localization

Hiroki Komiyama (Meiji, University, Japan); Takeshi Amishima (Meiji University, Japan)

Pos1.71 Generating Multiple Angular Momentum Vortex Beams Using an Artificial Metasurface

Jiakai Zhang, JiaHui Fu, Dengshuang Yi and Yiding Liu (Harbin Institute of Technology, China); Yizhi Zhang (Harbin Institute of Technology, China); Wentao Liang and Kuang Zhang (Harbin Institute of Technology, China)

Pos1.72 Modeling for Radio Propagation Estimation: A VAE-Based Feature Analysis

Kosuke Nakamitsu and Miyuki Hirose (Kyushu Institute of Technology, Japan); Satoshi Iwasaki and Kenshi Horihata (Kozo Keikaku Engineering Inc., Japan)

Pos1.73 A 1-Watt Rectenna Prototype for Wireless Power Charging of Lunar Robots

Anil Sejal Jain (Tohoku University, Japan); Hiroyasu Sato (Tohoku University, Japan); Shreya Santra (Tohoku University, Japan); Kazuya Yoshida (Space Robotics Laboratory, Tohoku University, Japan); Qiang Chen (Tohoku University, Japan)

Pos1.74 Microstrip Resonator Performance Testing for Diabetes Classification Using Artificial Neural Network and K-Nearest Neighbor Methods

Yusnita Rahayu, Irsan Taufik Ali and Aris Setiawan (Universitas Riau, Indonesia)

Pos1.75 RF Assessment of the Mechanical Design of the Compact Antenna Test Range for HERTZ 2.0

Cecilia Cappellin, Pasquale Giuseppe Nicolaci and Min Zhou (TICRA, Denmark); Giuseppe Valsecchi and Mauro Maggioni (MediaLario, Italy); Claudio Franchini (Microvawe Engineering Consultant, Italy); Luis Rolo (European Space Agency, ESTEC, The Netherlands); Antonio Riccardi (ESTEC, The Netherlands)

Pos1.76 On-Antenna Power Combining Dual-Band and Dual-Polarized Phased Array Antenna Module for Satellite Communication

Bumhyun Kim (Pohang University of Science and Technology (POSTECH), Korea (South)); Siros Bahrami and Donggeun An (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))

Pos1.77 Silicon-Based V-Band Circularly Polarized Antenna

Zeyuan Chen (Northwestern Polytechnical University, China); Xilong Lu (Yangtze River Delta Research Institute, Northwestern Polytechnical University, China); Bokai Wen, Xueyang Fang, Yuehao Guo and Jian-ying Li (Northwestern Polytechnical University, China)

Tuesday, October 28 13:30 - 14:00

TS2: Technical Seminar 2: AET

Room: Event hall Stage

Tuesday, October 28 15:30 - 17:10

2A7: Remote Sensing and Satellite Propagation

Room A

Chairs: Shunichi Futatsumori (Electronic Navigation Research Institute, Japan), Yasuyuki Maekawa (Osaka Electro-Communication University, Japan)

15:30 *Introduction of PALSAR Series ~Development of SAR Antenna~*

Masanobu Shibata, Shusuke Ota, Shohei Nakamura and Yu Okada (Mitsubishi Electric Corporation, Japan); Keisho Ito, Takeshi Motohka and Yukihiro Kankaku (Japan Aerospace Exploration Agency, Japan)
(Invited Paper)

16:10 *Preliminary Analysis of the Impact of Rain Attenuation Around Reference Ground Station Using One-Minute Rainfall Data*

Peeramed Chodkaveekityada and Thanyaporn Supasirasatkul (King Mongkut's Institute of Technology Ladkrabang, Thailand)

16:30 *A Study on the Mean Canting Angle of Raindrops in Ka-Band Satellite Communications Links*

Yasuyuki Maekawa and Yoshiaki Shibagaki (Osaka Electro-Communication University, Japan)

16:50 *Big Data Enhancement of R0.01 Reliability for Rain Attenuation Model Optimization in Thailand*

Peeramed Chodkaveekityada and Wetchaphat Pa-In (King Mongkut's Institute of Technology Ladkrabang, Thailand)

2B7: [OS27] Reconfigurable Intelligent Surfaces: Recent Developments and Applications

Room B

Chairs: Mohsen Khalily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)), Okan Yurduseven (Queen's University Belfast, United Kingdom (Great Britain))

15:30 *Hybrid RIS Aided Wireless Communications*

Nhan Nguyen and Markku Juntti (University of Oulu, Finland)

15:50 *Programmable Metasurfaces for Computational DoA Estimation: Experimental Validation*

Okan Yurduseven, María García Fernández and Guillermo Alvarez Narciandi (Queen's University Belfast, United Kingdom (Great Britain)); Mohsen Khalily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Amir Masoud Molaei (Queen's University Belfast, United Kingdom (Great Britain))

16:10 *Channel Measurements for Indoor and Outdoor Reconfigurable Intelligent Surface (RIS)-Assisted Links at 3.5 GHz*

Demos Serghiou, Ali Araghi and Maryam Khodadadi (University of Surrey, United Kingdom (Great Britain)); Okan Yurduseven (Queen's University Belfast, United Kingdom (Great Britain)); Mohsen Khalily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Rahim Tafazolli (University of Surrey, United Kingdom (Great Britain))

16:30 *Physical Properties of Liquid Crystals in GHz Band*

Toru Fujisawa (Tohoku University, Japan)

16:50 *Generative Adversarial Network-Enabled Inverse Design of Multifunctional Metasurfaces*

Xiaosong Liu, Xianbo Cao, Tao Hong and Wen Jiang (Xidian University, China)

2C7: Recent Advances in CEM and Relevant Techniques

Room C

Chairs: Yayun Cheng (Harbin Institute of Technology, China), Ryo Natsuaki (The University of Tokyo, Japan)

15:30 *Ray-Tracing and Physical-Optics Model for Multibeam Array Antennas Combined with a Dielectric Lens*

Hairu Wang and Mingzheng Chen (KTH Royal Institute of Technology, Sweden); Francisco Mesa (University of Seville, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)

15:50 *Radiation Properties of Two-Dimensional Straight Photonic Crystal Waveguide with Air-Hole Array Coupled to Dielectric Slab Waveguides*

Masahiro Tanaka (Gifu University, Japan)

16:10 *Calculation of Surface Impedances Using Method of Moments*

Alexander Gausmann, Lukas Warkentin and Dirk Manteuffel (Leibniz University Hannover, Germany)

16:30 *Characteristic Modes of Periodic Structures in Stratified Media Using the Method of Moments*

Lukas Warkentin (Leibniz University Hannover, Germany); Adrian Mrochen (Leibniz Universität Hannover, Germany); Dirk Manteuffel (University of Hannover, Germany)

16:50 *PINNs-Driven Meshless Electric Field Simulation of Striplines*

Mubashra Nabi (University of Southern Denmark, Denmark); Mohamed Kheir (University of Southern Denmark (SDU), Denmark); Thomas Ebel (CIE SDU, Denmark)

2D7: [OS08] HAPS, NTN and related Propagation

Room D

Chairs: Akihiro Sato (Softbank Corp., Japan), Hajime Suzuki (CSIRO, Australia)

15:30 *Enhancing O2I Path Loss Prediction Using Compound Power Modeling*

Young Chul Lee (Mokpo National Maritime University, Korea (South)); Khairunnisa Aziding (International Islamic University Malaysia); Chul Woo Byeon (Dankook University)

15:50 *A Study of Arrival Angle Characteristics on the Mobile Station in Vegetation Areas for High Base Station Environment*

Akihiro Sato, Sho Kimura and Hideki Omote (Softbank Corp., Japan)

16:10 *Rain Resilience of MIMO Ground Stations for LEO Constellations*

Oscar Martinez (Thales Alenia Space, France); Thomas Delamotte (Bundeswehr University Munich, Germany); Hervé Legay (Thalès Alenia Space, France); Andreas Knopp (Bundeswehr University Munich, Germany)

16:30 *5 GHz Band Unmanned Aerial Vehicle-Based Virtual Array Channel Sounding in Indoor and Outdoor Environments*

Kentaro Saito and Kensei Ishizuka (Tottori University, Japan); Sora Kojima (Tokyo Denki University, Japan)

16:50 *Extending Statistical Clutter Loss Model for HAPS Propagation*

Hajime Suzuki (CSIRO, Australia)

2E7: Broadband and Small Antennas

Room E

Chairs: Ichiro Oshima (Denki Kogyo Co., Ltd., Japan), Kunio Sakakibara (Nagoya Institute of Technology, Japan)

15:30 *Design of Broadband Waveguide Transition to Back-Short-SIW Through Dielectric Cavity in Multi-Layer Substrate*

Kunio Sakakibara, Taiga Sugimoto, Azuki Iwamoto, Kenta Nishimura, Yoshiki Sugimoto and Nobuyoshi Kikuma (Nagoya Institute of Technology, Japan)

15:50 *Dual-Polarized Flexible Antenna Using Closely Arranged Staircase-Shape Trapezoidal Patches*

Mohammad Ameen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

16:10 *Design of Tightly Coupled Dipole Array with Resistor-Loaded Shorting Pins*

Takashi Uno, Takashi Maruyama, Tai Tanaka and Toru Takahashi (Mitsubishi Electric Corporation, Japan)

16:30 *Bandwidth Enhancement of a DRA Based on Characteristic Modes Analysis*

Ammar Romain (University Of Rennes, France); Ala Sharaiha (Université de Rennes & IETR, France); Sylvain Collardey (University of Rennes 1, France)

16:50 *Low-Profile Magnetolectric Dipole Antenna Array with Heat Dissipation Enhancement*

Junming Ding (Shanghaijiaotong University, China); Min Tang (Shanghai Jiao Tong University, China); Yue Ping Zhang (Nanyang Technological University, Singapore)

2F7: [OS14] Emerging Technologies in Transmitarray/Lens Antennas and RISs for Beyond 5G Systems

Room F

Chairs: Shu-Lin Chen (University of Technology Sydney, Australia), Lizhao Song (University of Technology Sydney, Australia & N/a, Australia)

15:30 *A Wideband Flat Gradient-Index Lens for Wide-Angle Multi-Beam Radiation*

Lizhao Song (University of Technology Sydney, Australia & N/a, Australia); Peiyuan Qin and Y. Jay Guo (University of Technology Sydney, Australia)

15:50 *A Luneburg Lens Antenna with High Aperture Efficiency*

Guo-Ting Liang, Bohai Zhang, Shuai Gao, Zhe Chen and Tao Yuan (Shenzhen University, China)

16:10 *Horizontally-Aligned Reconfigurable Generalized Joined Coupler Matrix with Independently Scanned Multibeam*

Yang Xu, Ming Li, Hao Zhang, Shu-Lin Chen and Y. Jay Guo (University of Technology Sydney, Australia)

16:30 *Beam-Steerable Antenna Pair Fed by a Varactor-Based Frequency-Swappable Diplexer*

Yuan Yuan (The University of Queensland, Australia & The University of Adelaide, Australia); Shengjian Jammy Chen (Flinders University, Australia & The University of Adelaide, Australia); Christophe Fumeaux (University of Queensland, Australia)

16:50 *Design Metasurface Glass for Dual-Functionality in 5G Communication and Sensing Applications*

Ahmed Abdeen, Jr (IEgypt-Japan University of Science and Technology, Egypt & Electronics Research Institute (ERI), Egypt); Adel Bedair (Egypt-Japan University of Science and Technology, Egypt); Ahmed Sayed Ahmed Abdelhamid Allam (Egypt-Japan University of Science and Technology (E-JUST), Egypt); Tanemasa Asano (Kyushu University, Japan)

2G7: Novel Control Techniques for EM Waves and Circuits

Room G

Chairs: Sangkil Kim (Pusan National University, Korea (South)), Yuichi Kimura (Saitama University, Japan)

15:30 *Parameter Reduction of Acceleration Framework for Automatic Circuit Design with GA*

Yuta Takayama, Takuma Akada and Kazuhiro Fujimori (Okayama University, Japan)

15:50 *Phase Nonlinearity Compensation Under Low-Power Conditions in Wideband VNA Systems*

Sungjun Cho (Korea Advanced Institute of Science and Technology, Korea (South)); Seong-Jin Kim (KAIST, Korea (South)); Ji-Young Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Jong-Won Yu (KAIST, Korea (South))

16:10 *Broadband Frequency-Reconfigurable Metamaterial Absorber Using Large-Area Vanadium Dioxide-Based Switches*

Junghyeon Kim, Minjae Lee and Sungjoon Lim (Chung-Ang University, Korea (South))

16:30 *Development of Multi-Band Transparent Microwave Absorber Glass Plate*

Yuto Ohta and Yoshinobu Okano (Tokyo City University, Japan); Oka Hidetoshi, Hideaki Oshima, Mamoru Yoshida, Katsuki Ishikawa and Daisuke Inaoka (Nippon Sheet Glass Company, Japan)

16:50 *Comparative Study of Additive Manufacturing Technologies for Millimeter-Wave OMTs*

Xin Wen, John S. Kot, Keyi Ma and Rodica Ramer (University of New South Wales, Australia)

Wednesday, October 29

Wednesday, October 29 9:00 - 10:40

3A1: [OS05] Propagation Channel Models and Measurement Methodologies for 6G Communication and Sensing

Room A

Chairs: Taro Eichler (Rohde & Schwarz, Germany), Wilhelm Keusgen (Technische Universität Berlin, Germany)

9:00 *Measuring Time-Varying THz-Channels at 300 GHz for High-Resolution Sensing and Communication*

Wilhelm Keusgen (Technische Universität Berlin, Germany); Taro Eichler (Rohde & Schwarz, Germany)

9:40 *Unlocking the Potential of THz Links for 6G Aerial Communications and Sensing*

Dajana Cassioli and Alex Piccioni (University of L'Aquila, Italy)

10:00 *Human RF Channel Modeling: Ray Tracing Methods for 6G ISAC*

Tarun K Chawla (Remcom, Inc, USA); Benjamin M Hardy (Remcom Inc, USA); Gregory Skidmore (Remcom, Inc., USA); Swagato Mukherjee (Remcom Inc, USA)

10:20 Indoor Dynamic Channel Measurement for ISAC

Wataru Yamada and Minoru Inomata (NTT, Japan); Tomoki Murakami (NTT Corporation, Japan); Ryotaro Taniguchi (NTT, Japan); Motoharu Sasaki (NTT Corporation, Japan); Nobuaki Kuno, Koshiro Kitao, Satoshi Suyama and Takahiro Tomie (NTT DOCOMO, INC, Japan); Taro Eichler (Rohde & Schwarz, Germany); Wilhelm Keusgen (Technische Universität Berlin, Germany)

3B1: DOA/TOF Estimation, Localization, Sensing and Radar

Room B

Chairs: Tomoki Murakami (NTT Corporation, Japan), Kazuma Tomimoto (Softbank Corp., Japan)

9:00 Evaluation of Element Reduction Effect in Terahertz Synthetic Aperture Imaging Using Compressed Sensing

Hikaru Ishizuka, Keizo Cho, Hiroaki Nakabayashi and Koji Suizu (Chiba Institute of Technology, Japan)

9:20 Experimental Study of Surface Velocity Sensing in an Open-Channel Flume Using Millimeter-Wave FMCW Radar

Takumi Matsuda and Hiroyoshi Yamada (Niigata University, Japan); Hiroyasu Yasuda (Niigata University & Department of Civil and Environmental Engineering, Japan)

9:40 Study on Target Classification in NLOS Using Radio Wave Sensing

Shota Iwasaki (Mitsubishi Electric Corporation, Japan)

10:00 Experimental Evaluation of Outline Refinement of Millimeter-Wave Radar Imaging Using CNN Regression

Hirofumi Joshita, Koki Kato, Naoki Honma and Kentaro Murata (Iwate University, Japan)

10:20 Coconut Quality Inspection Using Natural Resonant Frequencies and Random Forest Classification

Tanawut Tantisoparak (Khon Kaen University, Thailand); Thunyawat Limpiti (Walailak University, Thailand); C. Kittiyanyunya (KMUTL, Thailand); Chulalak Talubnak (Chandrasakorn Rajabhat University, Thailand)

3C1: [OS29] Recent Advances in Radar Technologies and Related Topics

Room C

Chairs: Kangwook Kim (GIST, Korea (South)), Takuji Arima (Tokyo University of Agriculture and Technology, Japan)

9:00 Direct-Writing of an Antenna with Distributed Loading for Subsurface Radar Imaging

Woong Kang (Korea Institute of Geoscience and Mineral Resources, Korea (South)); Kangwook Kim (GIST, Korea (South))

9:20 Straighten Out the Complex Signal: a CMA-Inspired Adaptive Array for Vital Sign Detection Radar

Naoki Honma, Kentaro Murata, Morio Iwai and Koichiro Kobayashi (Iwate University, Japan)

9:40 Preliminary Adverse Weather Effect Evaluations of 96 GHz Millimeter-Wave Radar for Airport Runway Foreign Object Debris Detection System

Shunichi Futatsumori and Noriaki Hiraga (Electronic Navigation Research Institute, Japan)

10:00 Recent Advances in Space-Time Coding Direct Antenna Modulation Based Radar Sensor

Shuping Li and Chung-Tse Michael Wu (Rutgers University, USA)

10:20 FDTD Analysis of on-Glass Dipole Antenna Mounted in Full-Scale Vehicle on Flat Earth for Radar Application

Yuya Abe (Tokyo University of Agriculture and Technology, Japan); Toru Uno (Tokyo University of Agricultural Technology, Japan); Takuji Arima (Tokyo University of Agriculture and Technology, Japan); Keisuke Arai and Osamu Kagaya (AGC Inc., Japan)

3D1: [OS11] Antennas for 6G/Next Generation Communications

Room D

Chairs: Nonchanutt Chudpooti (King Mongkut's University of Technology North Bangkok, Thailand), Keisuke Sato (Denki Kogyo Co. Ltd., Japan)

9:00 Narrow Multi-Beam Formation Technology for Frequency Sharing Between Low Earth Orbit Satellite and Ground Terminals -a Study on Positioning Error of Non-Wired Phased Array Antenna Mounted on PicoSats-

Genma Hattori, So Ema, Yuta Horie and Kazuhisa Sano (Microwave Factory Company Limited, Japan); Takashi Takahashi, Takuya Okura and Hiroyuki Tsuji (National Institute of Information and Communications Technology, Japan); Sumio Morioka and Takahiro Inagawa (Interstellar Technologies Inc., Japan)

9:20 Dual-Band CP Reconfigurable Antenna Composed of Metalines and Patches

Tomoki Abe (Panasonic Industry, Japan); Hisamatsu Nakano (Hosei University, Japan)

9:40 3D-Printed Antenna Solutions for 6G: a Review with Emphasis on Research in Thailand

Nonchanutt Chudpooti and Prayoot Akkaraekthalin (King Mongkut's University of Technology North Bangkok, Thailand)

10:00 Substrate-Integrated Inverted-L Slot Array for 6G Mobile Communications

Alberto Hernández-Escobar and Takashi Tomura (Institute of Science Tokyo, Japan)

10:20 Photonic-Assisted Radio Beamformer for High-Frequency Wireless Applications

Ken Hiraga, Honoka Itou, Hirofumi Sasaki and Riichi Kudo (NTT Corporation, Japan)

3E1: [OS13] Emergent Wireless Power Transmission Applications and Core Technologies

Room E

Chairs: Naoki Hasegawa (Softbank, Japan), Yuki Tanaka (Panasonic Holdings Corporation, Japan)

9:00 Integrated Communication and Wireless Power Transfer System with Beamforming Control

Yuta Nakamoto (Softbank Corp., Japan); Naoki Hasegawa (Softbank, Japan); Kosuke Takeda, Masaya Ogino, Kiyotaka Imai and Takashi Hirakawa (SoftBank Corp., Japan); Yuki Takagi (Softbank corp., Japan); Yoshichika Ohta (Softbank Corp., Japan)

9:20 Analysis of Matching Circuit Loss Versus Transmitting Electrode Length in Platform-Electrode Capacitive Power Transfer

Shinji Abe (Power Wave Co. Ltd, Japan)

9:40 A Novel Rectenna Structure with a GaAs Rectenna MMIC and an EM Coupled External Antenna

Naoki Sakai, Masaomi Tsuru, Keisuke Noguchi and Kenji Itoh (Kanazawa Institute of Technology, Japan)

10:00 Experimental Evaluation of Beamforming with Broad Nulls for Microwave Power Transfer

Zhengdong Lin, Yu Kagaya, Akira Ebihara, Daisuke Kobuchi, Hiroyuki Morikawa and Yoshiaki Narusue (The University of Tokyo, Japan)

10:20 *Experimental Evaluation of Massive RIS-Assisted Wireless Power Transfer Based on Channel Estimation with Limited Power Sensors*

Yuto Ozawa, Kentaro Murata and Naoki Honma (Iwate University, Japan)

3F1: [OS23] IEEE AP-S and ISAP 2025 Young Professional Special Session

Room F

Chairs: Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South)), Can Ding (University of Technology Sydney (UTS), Australia)

9:00 *Low Loss and Permittivity Glass for Electronic Packaging Applications*

Rocio Rodriguez-Cano (Aalborg University, Denmark); Michael T Lanagan (The Pennsylvania State University, USA)

9:25 *Spectral-Domain Green's Function Analysis of Connected Slot Antenna Arrays with Multilayer Dielectric Media*

Dongju Choi (Ulsan National Institute of Science and Technology, Korea (South)); Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South))

9:50 *RePH: RIS-Inspired Electronic Phantom*

Kentaro Murata, Naoki Honma and Shinya Miyajima (Iwate University, Japan)

10:15 *Design of Low-Profile Square-Bottom Lens Antenna Array with anti-Reflection Structure on Lens Surface of High-Permittivity Material*

Yoshiki Sugimoto, Hideaki Sugiyama, Kunio Sakakibara and Nobuyoshi Kikuma (Nagoya Institute of Technology, Japan)

Wednesday, October 29 10:00 - 12:00

SDC1: Student Design Contest: Category A (Received Signal Strength Estimation)

Room: Event hall Stage

Short presentation (10:00 - 10:45) 10:00 "Smart IoT Laboratory, Tottori University (Japan)," Taichi Yamamoto (Tottori University, Japan), Gradient Descent-Based Calibration of Raytracing Simulation for Received Power Prediction 10:15 "Team Rayleigh of Chiba Tech (Japan)," Fumiya Yatsumonji (Chiba Institute of Technology, Japan) 10:30 "Ichilab (Japan)," So Okada (Yokohama National University, Japan), Four-Feature Ridge Regression with Open-Door-Path and Behind-Wall Indicators for Indoor RSSI Estimation at 5GHz Received power measurement and calculation (10:55 - 12:00) 10:55 Measurement at the target points 11:10 Discussion time to determine the reference points 11:20 Measurement at the reference points 11:30 Calculation and submission of the received power at the target points 11:50 Announcement of the current rankings

Wednesday, October 29 11:00 - 12:40

3A2: Planar Antennas and Array antenna technology

Room A

Chairs: Hiroshi Hashiguchi (National Defense Academy, Japan), Kazuhiro Honda (University of Toyama, Japan)

11:00 *Emerging Leaky-Wave Antenna Technologies for Wireless Systems*

Dongze Zheng (Southeast University, China); Ke Wu (Polytechnique Montréal, Canada)
(Invited Paper)

11:40 *Design and Fabrication of Wideband Patch Antenna for Narrow Element Spacing Array*

Takashi Maruyama, Jun Goto and Shigeo Udagawa (Mitsubishi Electric Corporation, Japan)

12:00 *Fundamental Study on Circularly Polarized Ring Slot and Curl Antenna Elements for 20-GHz / 30-GHz Band Shared-Aperture Phased Arrays*

Takashi Shiraki, Takehisa Wada and Takashi Tomura (Institute of Science Tokyo, Japan); Yuta Mori (Sharp Corporation, Japan)

12:20 *A Fast DBF Array Antenna Calibration by Multi-Frequency Multi-Beam REV Method*

Tomoki Nakazawa, Koki Furuuchi, Welay Gerezgiher Berhe, Tomoyuki Furuichi, Satoshi Tsukamoto and Noriharu Suematsu (Tohoku University, Japan)

3B2: RIS and Antenna Systems for Diverse Wireless Applications

Room B

Chairs: Mitoshi Fujimoto (University of Fukui, Japan), Nhan Nguyen (University of Oulu, Finland)

11:00 *Study on the Arrangement of Metal Reflectors for Indoor Wireless LANs Using the 150 GHz Band*

Keizo Cho and Akihiko Hirata (Chiba Institute of Technology, Japan)

11:20 *A 2-Bit Reconfigurable Intelligent Surface Unit for Far-Field Focusing and Beam Scanning*

Wentao Liang, Wei Li, Maolin Chai and Liangyu Sun (Harbin Institute of Technology, China); Ruihao Gao (Harbin Institute of Technology, China)

11:40 *Towards a 1-Bit Modulated Wireless Sensing System Utilizing Unique Capabilities of RIS*

Mondeep Saikia and Amir Masoud Molaei (Queen's University Belfast, United Kingdom (Great Britain)); Luis M. Pessoa (INESC TEC & Faculty of Engineering, University of Porto, Portugal); Simon Cotton (Queen's University, Belfast, United Kingdom (Great Britain) & Queen's University Belfast, United Kingdom (Great Britain)); Okan Yurduseven (Queen's University Belfast, United Kingdom (Great Britain))

12:00 *Broadband Reflective Metasurface at X-Band Frequency Using Snowflakes Fractal Ring Design*

Nur Syahirah Mohd Yaziz (Universiti Teknologi Malaysia, Malaysia); Mohamad Kamal A-Rahim (Universiti Teknologi Malaysia, Malaysia & Advanced RF and Microwave, Malaysia); Noor Asmawati Binti Samsuri (Universiti Teknologi Malaysia, Malaysia); Farid Zubir (Universiti Teknologi Malaysia & Faculty of Electrical Engineering, Malaysia); Sunti Tuntrakool (KMUTL, Thailand)

12:20 *A Wireless Strain Sensor with Independent Bi-Directional Sensing Based on a Dual-Band Antenna*

Lei-Jun Siau, Wen-Xi Tan, Jie-Wei Gim, Pei Song Chee, Eng Hock Lim and Jen Hahn Low (Universiti Tunku Abdul Rahman, Malaysia)

3C2: [OS20] Reconfigurable Intelligent Surfaces, Metasurfaces

Room C

Chairs: Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South)), Yasutaka Murakami (UEC, Japan)

11:00 Pilot Test of Coverage Expansion in Local 5G Using Metasurface Reflector in a Factory

Keisuke Arai and Osamu Kagaya (AGC Inc., Japan); Kenichi Kimura (Fujita Corporation, Japan); Manabu Fujino (Magna Wireless Corporation, Japan); Hideki Ohmae (Toyota Motor Corporation, Japan)

11:20 Scattering Characteristics of a Metamaterial-Based Thin Electromagnetic Scattering Sheet

Yasutaka Murakami (UEC, Japan); Jerdvisanop Chakarothai, Lira Hamada and Katsumi Fujii (National Institute of Information and Communications Technology, Japan)

11:40 Reconfigurable 2-Bit Coding Metasurface Reflector with Mechanical Slide Operation

Oora Baba, Ryuji Kuse and Takeshi Fukusako (Kumamoto University, Japan); Ho-Yu Lin, Akihiro Sato and Hideki Omote (Softbank Corp., Japan)

12:00 Reconfigurable Reflection Direction and Operating Frequency Band 1-Bit Reflectarray Antenna

Taisei Urakami (National Institute of Technology, Kagawa College, Japan); Tamami Maruyama (Hiroshima Institute of Technology, Japan); Akira Ono (National Institute of Technology (KOSEN), Kagawa College, Japan); Na Chen and Minoru Okada (Nara Institute of Science and Technology, Japan)

12:20 Metaradar: a Fully Integrated MIMO Radar with System-Level Time Synchronization

Bao Thai Hoang (Ulsan National Institute of Science and Technology, Korea (South)); Jin Myeong Heo (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); Anthony Grbic (University of Michigan, Ann Arbor, USA); Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South))

3D2: mmW/THz Propagation

Room D

Chairs: Azril Haniz (National Institute of Information and Communications Technology, Japan), Akihiko Hirata (Chiba Institute of Technology, Japan)

11:00 A Measurement of Transmission Characteristics of Laminated Glasses in mmWave and Sub-THz Bands

Masaki Takanashi (Toyota Central R&D labs. Inc., Japan); Toshiaki Watanabe (Toyota Central R&D Labs., Inc., Japan); Katsushi Sanda (Toyota Central Research and Development Laboratories, Incorporated, Japan); Keizo Inagaki (National Institute of Information and Communications Technology, Japan & Waseda University, Japan); Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Issei Watanabe (National Institute of Information and Communications Technology, Japan); Norihiko Sekine (National Institute for Information and Communications Technology, Japan); Akifumi Kasamatsu (National Institute of Information and Communications Technology, Japan)

11:20 Effect of Cylindrical Acrylic Scattering on Polarization Characteristics of Terahertz Waves

Masayuki Miyashita (SoftBank Corp., Japan); Kazuma Tomimoto (Softbank Corp., Japan)

11:40 Application of MIMO Multiplexing Technology to 120 GHz Band Sheet LAN

Kei Takahashi, Tomoya Sugiyama and Akihiko Hirata (Chiba Institute of Technology, Japan)

12:00 Evaluation of Blockage Probability of Direct Wave by Human Bodies in Indoor Hotspot Environment

Kosuke Ishii and Tetsuro Imai (Tokyo Denki University, Japan); Toshiki Hozen and Kazuma Tomimoto (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Tomonori Ikeda (Softbank Corp., Japan)

12:20 Directional Diversity Effects in Drone Relay System Mounted with Multi-Beam Antenna

Yudai Ishikawa and Tetsuro Imai (Tokyo Denki University, Japan)

3E2: [OS15] Technologies in implementation and deployment of mmWave

Room E

Chairs: Rui Ma (pSemi Corporation, USA), Hideki Ueda (Murata Manufacturing, Japan)

11:00 System Modeling for Practical mmWave Phased Array Implementation

Rui Ma (pSemi Corporation, USA); Peter Bacon (Peregrine Semiconductor, USA)

11:20 60GHz Wireless Module for Long Distance Transmission and Mobility

Hiroaki Asano (Panasonic & Panasonic System Networks R&D Laboratory, Japan); Sotaro Shinkai and Tsutomu Asanuma (Panasonic System Networks R&D Laboratory, Japan)

11:40 Bandwidth and Front-to-Back Ratio Improvement of Microstrip Antennas with Grounded Wall at Edge of Narrow Substrate

Hideki Ueda, Ryo Komura and Yoshiki Yamada (Murata Manufacturing, Japan); Kaoru Sudo (Murata Manufacturing Co., Ltd., Japan)

12:00 Design of a DUT Socket for OTA Testing with Automated Test Equipment

Jose Moreira (Advantest Europe GmbH, Germany); Frank Goh (Advantest, Singapore); Daniel Sun (Advantest, China); Natsuki Shiota (Advantest, Japan); Kewei Qin, Eric Sun, Yongjun Hu and Wei Xu (Advantest, China); Lu Shuai and Lei Pu (Sanechips, China); Min Lu (Sanechips Technology Co., Ltd, China & State Key Laboratory of Mobile Network and Mobile Multimedia Technology, China); Yang Hao (Sanechips, China)

12:20 Synthetic Radar Return-Based Neural Network for Detecting Breathing Anomaly

Benjamin M Hardy and Swagato Mukherjee (Remcom Inc, USA); Tarun K Chawla (Remcom, Inc, USA)

3F2: [OS23] IEEE AP-S and ISAP 2025 Young Professional Special Session

Room F

Chairs: Kentaro Murata (Iwate University, Japan), Rocio Rodriguez-Cano (Aalborg University, Denmark)

11:00 Modelling and Experimental Validation of Fluorescence Modulation in Mid-Infrared Photothermal Microscopy

Sahil Sharma (Indian Institute of Technology, Delhi, India); Joby Joseph (Professor IIT Delhi, India); Qammer Abbasi, Jonathan Taylor and Hasan Abbas (University of Glasgow, United Kingdom (Great Britain))

11:25 Near-Field Surface Profilometer Using Compact Terahertz All-Dielectric Magnetic Dipole Antenna

Daniel Headland (The University of Adelaide, Australia); Guillermo Carpintero (Universidad Carlos III de Madrid, Spain)

11:50 Enable Multi-Band Shared-Aperture Patch Array via Symmetrical Residual Current Cancellation

Can Ding (University of Technology Sydney (UTS), Australia); Xichen Wang, Li Shiyong, Guoqiang Zhao and Houjun Sun (Beijing Institute of Technology, China)

12:15 Research on Wireless Technology Connecting Cyber and Physical Spaces

Ryotaro Taniguchi (NTT Corporation, Japan); Minoru Inomata (NTT, Japan); Wataru Yamada, Tomoki Murakami and Tomoaki Ogawa (NTT Corporation, Japan)

Wednesday, October 29 13:00 - 13:30

TS3: Technical Seminar 3: Rohde & Schwarz Japan

Room: Event hall Stage

Wednesday, October 29 13:40 - 15:20

Pos2: Poster Session 2

Room: Event hall

Pos2.1 Direction Selective Wavefront Engineering with Asymmetric Metagratings

Zhen Tan (Nantong University, China); Jianjia Yi (Xi'an Jiaotong University, China); Shah Nawaz Burokur (LEME, Univ Paris Nanterre, France)

Pos2.2 Fast Calculation Method of Radiation Patterns for on-Glass Electric Dipole Arrays

Ukyo Komai (Tokyo University of Agriculture and Technology, Japan); Toru Uno (Tokyo University of Agricultural Technology, Japan); Takuji Arima (Tokyo University of Agriculture and Technology, Japan); Keisuke Arai and Osamu Kagaya (AGC Inc., Japan)

Pos2.3 3-D Reconfigurable Wideband Frequency Selective Surface Based on Coupled Slotline Structures

Rong Li, Tao Hong, Shitong Wang, Xianbo Cao and Wen Jiang (Xidian University, China)

Pos2.4 Experimental Validation of Up/down Converter for High-Altitude Platform Station (HAPS)

Ting Kai Jiang, Chia-Kai Wang and Tzyh-Ghuang Ma (National Taiwan University of Science and Technology, Taiwan)

Pos2.5 Designing Sparse Planar Arrays with Holes Using Hole-Minimizing Strategy

Ryuichiro Kataoka (Yokohama National University, Japan); Steven Wandale (University of Malawi, Malawi); Koichi Ichige (Yokohama National University, Japan)

Pos2.6 Quantum Computing Formulation for Antenna Applications Using Pseudo Binary Encoding

Ryo Yamaguchi (SOFTBANK Corp., Japan); Tomonori Ikeda and Kazuma Tomimoto (Softbank Corp., Japan)

Pos2.7 Design of a W-Band Metasurface Absorber with Optically Transparent Performance

Young-Pyo Hong and Tae-Weon Kang (Korea Research Institute of Standards and Science, Korea (South)); In-June Hwang (Korea Research Institute of Standards and Science (KRISS), Korea (South)); Dal-Jae Yun (Korea Research Institute of Standards and Science, Korea (South)); Dahye Shin and Jinwoo Park (Agency for Defense Development, Korea (South))

Pos2.8 Design of 4-Beam Orthogonal Switching Matrices Using Couplers with Smaller Coupling Ratio

Boyu Zhang, Shengjia Wu, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan); Nelson Fonseca (Anywaves, France)

Pos2.9 Beamforming of Array Antennas Using Quantum Annealing

Kayako Yuda and Mitoshi Fujimoto (University of Fukui, Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Kazuma Tomimoto and Tomonori Ikeda (Softbank Corp., Japan)

Pos2.10 Amplitude-Tailorable Spin-Decoupled Metasurface for Wideband Dual-Circularly Polarized Low-Sidelobe Transmitarray

Weixu Yang, Ke Chen and Yijun Feng (Nanjing University, China)

Pos2.11 Propagation Study on the Feasibility and Hardware Requirements for RIS-Assisted Indoor THz-Communications

Christoph Herold, Bo Kum Jung and Thomas Kürner (Technische Universität Braunschweig, Germany)

Pos2.12 Positional Accuracy of Multilateration and ADS-B on Airport Surface Through Flight Experiment

Junichi Honda and Takuya Otsuyama (Electronic Navigation Research Institute, Japan); Yasuyuki Kakubari (Electronic Navigation Research Institute, MPAT, Japan); Keisuke Matsunaga (Electronic Navigation Research Institute, Japan)

Pos2.13 Angle-Range Beamforming Based on FDA-MIMO

Jiangwei Jian (National University of Singapore, Singapore & University of Electronic Science and Technology of China, China); Koen Mouthaan (NUS, Singapore)

Pos2.14 Performance Evaluation of Non-Linear Precoded Massive MIMO-OFDM with Peak Cancellation

Kiyoaki Inada, Zhuoran Li and Osamu Muta (Kyushu University, Japan)

Pos2.15 Impedance Matching Method of Metasurface-Aided Magnetic Wireless Power Transfer for Deep Implants Based on Maximal Ratio Combining

Ryoya Ishiura, Maoyuan Li and Takahiro Aoyagi (Institute of Science Tokyo, Japan)

Pos2.16 Robust First-Order Bragg Peak Extraction Method Based on Improved Dynamic Programming

Zichun Wang, Yingning Dong and Xin Zhang (Harbin Institute of Technology, China)

Pos2.17 Initial Functionality Test of a Future Airport Surveillance Radar Using Software-Defined Radio

Kazuyuki Morioka (Electronic Navigation Research Institute, Japan); Gaku Sato (Electronic Navigation Research Institute, Japan & Yokohama National University, Japan); Naruto Yonemoto (Electronic Navigation Research Institute & National Institute of Maritime, Port, and Aviation Technology, Japan); Junichi Honda (Electronic Navigation Research Institute, Japan)

Pos2.18 Accuracy Assessment of Rebar Corrosion Estimation in Concrete Using UWB Radar

Masahiko Nishimoto (Kumamoto University, Japan); Yoshihiro Naka (University of Miyazaki, Japan); Kohichi Ogata (Kumamoto University, Japan)

Pos2.19 Semi-Implicit FDTD Analysis of a Spoof Plasmonic Structure with High-Contrast Gratings

Kazuhiro Fujita (Saitama Institute of Technology, Japan)

Pos2.20 Accuracy Improvement by Utilizing Electric Field Correction in the FDTD Method

Haku Inanobe and Takuji Arima (Tokyo University of Agriculture and Technology, Japan); Wataru Yamada (NTT Corporation, Japan)

Pos2.21 An Open-Loaded Coupled Line with Asymmetric Output Power for Developing Nonplanar Microwave Sensors

Chien-Hao Liu, Chen-Pu Chang, Ching-Lung Yen and Yuan-Tai Ho (National Taiwan University, Taiwan); Pai-Yen Chen (University of Illinois at Chicago, USA)

Pos2.22 Multimodal Bloch Analysis for the Retrieval of Constitutive Parameters Under Oblique Incidence

Moises Tercero (KTH Royal Institute of Technology, Sweden & Thales Research and Technology, France); Francisco Mesa (University of Seville, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)

Pos2.23 300-GHz Beam-Steering Wireless Communication Enabled by Tunable Laser & Chromatic Dispersion

Masato Kawano, Yoshiki Kamiura, Bo Li, Yuya Mikami and Kazutoshi Kato (Kyushu University, Japan)

Pos2.24 A Ka-Band Filtering Leaky-Wave Antenna Based on Single-Ridge Waveguide

Dongxu Wang and Sihai Hu (Xi'an Jiaotong University, China); Roberto Gómez-García (University of Alcalá, Spain); Kai-Da Xu (Xi'an Jiaotong University, China)

Pos2.25 Electromagnetic Characterization in a Thermally Constrained Environment at ONERA

Cedric Martel, Juan-Carlos Castelli, Aurélie Dorlé, Herve Jeuland, Aurélie Jankowiak, Jean-François Petex, Loïc Castanet and Francois Issac (ONERA, France)

Pos2.26 A Novel Low-RCS Phased ArrayBased on Principle of Phase Cancellation

Xin Yue, Jinbo Liu, Zengrui Li, Qingxin Guo and Yajin Wang (Communication University of China, China)

Pos2.27 Design and Simulation of an s-Band Slot Antenna Integrated into a 3U CubeSat Rail

Daisuke Nakayama, Tohlu Matsushima and Yuki Fukumoto (Kyushu Institute of Technology, Japan)

Pos2.28 A Slot-Coupled SRR Antenna for 5G n77 Applications

Wen Hsiu Hsu (University of SHU-TE, Taiwan)

Pos2.29 Design of a Circularly Dual-Polarized Wideband Microstrip Antenna Fed by Two Orthogonally-Arranged L-Probes and a Two-Section Hybrid Coupler

Yo Makabe and Yuichi Kimura (Saitama University, Japan)

Pos2.30 Design of a Low-Profile Wideband Ring Microstrip Antenna Fed by Two L-Probes with a Rat-Race Coupler

Seidai Suzuki and Yuichi Kimura (Saitama University, Japan)

Pos2.31 Antennas for Wireless Powering of Wearable Devices in Small Animal Medical Research

Haruki Ishigaki, Takafumi Fujimoto and Chai-Eu Guan (Nagasaki University, Japan)

Pos2.32 A Compact Polarization-Reconfigurable Transmit Phased Array for L-Band Radar

Haoze Luan and Gong Chen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

Pos2.33 Array Pattern Optimization Method for Modular Subarray-Based Fabry-Perot Cavity Antenna Array

Zi Li, Qiming Wang and Jiaran Qi (Harbin Institute of Technology, China)

Pos2.34 Decoupling and Cross-Polarization Suppression for Antenna Using Parasitic Strips

Mengdi Liu and Hui Li (Dalian University of Technology, China)

Pos2.35 Dynamic Pattern Generation of a Two-Element ESPAR Antenna Using Reactance Time Function

Anand Mohan Gupta and Masato Saito (University of the Ryukyus, Japan)

Pos2.36 Multiband, Short-Circuited Plate Dipole for Wi-Fi 8 and 6G Applications

Saou-Wen Su, Tung-Chan Yu and Ju-Cheng Huang (National Kaohsiung University of Science and Technology, Taiwan)

Pos2.37 A Tri-Band Shared-Aperture Antenna Based on Dipole and Taper Slots with Large Frequency Ratio

Xin Chen, Qing-Yi Guo and Yu-Xiang Sun (Shenzhen University, China)

Pos2.38 Omnidirectional Circularly Polarized Dielectric Resonator Antenna for UAV Applications

Sandra Zuleta and Yair Zarate (Pontificia Universidad Católica de Valparaíso, Chile); Francisco Pizarro (Pontificia Universidad Catolica de Valparaiso, Chile)

Pos2.39 A Low-Profile Wideband Endfire-Broadside Integrated mmWave Phased Array Antenna for B5G IoT Smartphones

Lixing Zhao (University of Electronic Science and Technology of China, China & None, China); Ya Fei Wu and Yu Jian Cheng (UESTC, China)

Pos2.40 A 1-Bit Broadband Angle-Insensitive Reconfigurable Metasurface for Multi-Beam Generation and Radar Cross Section Reduction

Fengan Li (Shanghai Jiao Tong University, China); Xiaochun LI (SHANGHAI Jiao Tong University, China); Ping LI (University of Electronic Science and Technology of China, China)

Pos2.41 Fully Additive Manufactured Ku-Feeder Link Antenna for Satellite Communications

Juan Andres Vásquez Peralvo, Symeon Chatzinotas, Hafsa Talpur and Ulan Myrzakhan (University of Luxembourg, Luxembourg)

Pos2.42 Performance Evaluation of Miniaturized MACKEY Using Interdigital Capacitor Based on Simulation and Measurement

Yoichi Murakami, Ryoya Kishi, Toru Fukasawa and Shigeru Makino (Kanazawa Institute of Technology, Japan)

Pos2.43 Effect of Breathing on Reflection and Diffraction of 300 GHz Radio Waves in the Human Body

Akihiko Hirata (Chiba Institute of Technology, Japan)

Pos2.44 Effect of Road Width on Non-Line-of-Sight Propagation over Intersections

Shunsuke Mabuchi and Mitoshi Fujimoto (University of Fukui, Japan)

Pos2.45 Oriented Ship Detection in SAR Images with Angle-Aware Gaussian IoU Loss

Xiaowo Xu (National University of Singapore, Singapore); Xiaoling Zhang (University of Electronic Science and Technology of China, China); Koen Mouthaan (NUS, Singapore)

Pos2.46 Unit Cell Design and Performance Evaluation of a Reconfigurable Intelligent Surface Utilizing Liquid Crystals

Kazuki Matsunaga, Mitsutaka Okita, Daiichi Suzuki and Shinichiro Oka (Japan Display Inc., Japan)

Pos2.47 Wireless Charging System for UAVs Based on High-Integration Irregular Asymmetric Coupler and Constant Current Output

Hao Wang, Chunyan Xiao, Sihui Hao and Bohan Yang (Beihang University, China)

Pos2.48 An Optically Modulated UHF RFID Tag and Its Application in Range of Motion Arc of Shoulder Rehabilitation

Chao Yu Jiang (University of Macau, Macao); Kam Weng Tam (University of Macau, China); Chi Hou Chio (University of Macau, Macao); Wenhai Zhang (Soochow University, China); Qiwei Chen and Junxiao Liu (Macau Wujing Technology Co Ltd, Macao); Hou-Pan Sio and Man-Chon Si (Macao Science Center, Macao); Fan Zou Chen (University of Macau, Macao); Tian Hua Tang (University of Macao, Macao); Cheng Teng (University of Macau, Macao); Ngai Kong (Crosstech Innovation Group Limited, China)

Pos2.49 A Fast Time-Frequency Transformation Method for EM Response Calculation Based on High-Frequency Transmission Line Equations

Yiqing Tao, Chunyan Xiao, Rundong Liu and Weiya Liang (Beihang University, China)

Pos2.50 Analysis of Effective Permittivity and Permeability in a Landy-Type Metamaterial Absorber

Takayuki Matsumuro and Satoru Shimizu (ATR, Japan); Toshikazu Sakano (Advanced Telecommunications Research Institute International, Japan)

Pos2.51 Dual-Band Metasurface to Improve Transmission Through Glass in mm-Wave Array Modules for Mobile Terminals

Rocio Rodriguez-Cano and Shuai Zhang (Aalborg University, Denmark)

Pos2.52 Eliminating Communication Blindspots Using a Single-RF Chain Planar 60 GHz Antenna Featuring High Gain and Wide-Beamwidth

Sungjun Han (Pohang University of Science and Technology (POSTECH), Korea (South)); Geon Park (POSTECH, Korea (South)); Dongseop Lee (Pohang University of Science and Technology (POSTECH), Korea (South)); Jeonghyo Lee (POSTECH, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))

Pos2.53 Design and Analysis of a 28 GHz Leaky-Wave Antenna with Coaxial Feeding

Takahisa Kanamoto (I-PEX Inc., Japan & Graduate School of Engineering, Takushoku University, Japan); Takumi Okubo and Toshiyuki Maeyama (Takushoku University, Japan); Hiroki Nakamura (I-PEX Inc., Japan); Genma Hattori (Graduate School of Engineering, Takushoku University, Japan)

Pos2.54 Design of 140 GHz Array Antenna Using Synthetic Fused Silica Glass Substrate

Daisuke Yamanaka and Osamu Kagaya (AGC Inc., Japan)

Pos2.55 Design of a Novel Planar Filtering Quasi-Yagi Antenna

Zhongpeng Liu (Northwestern Polytechnical University, China); Xilong Lu (Yangtze River Delta Research Institute, Northwestern Polytechnical University, China); Yunxi Tao and Liu Qingyue (Northwestern Polytechnical University, China); Zeyuan Chen (Northwestern Polytechnical University, China); Rui Zhang (Yangtze River Delta Research Institute, Northwestern Polytechnical University, China)

Pos2.56 Efficient Full-Wave Analysis and Optimization of Large Horn and Waveguide Antenna Arrays

Min Zhou, Pasquale Giuseppe Nicolaci and Erik Jørgensen (TICRA, Denmark)

Pos2.57 A DGS-Based Dual-Band Antenna for ISM, WiMAX, and X-Band Satellite Communication

Tithi Rani (Rajshahi University of Engineering and Technology, Bangladesh); Naymaa Rashid and Liton Chandra Paul (Pabna University of Science and Technology, Bangladesh); Sk A. Shezan (Northern Border University, Saudi Arabia); Md. Ashraful Haque (UTP, Bangladesh); Ali H Alenezi (Northern Border University, Saudi Arabia)

Pos2.58 Dual-Band Microstrip Antenna with T- and E-Shape Defected Ground Structure for Wi-Fi 7 Technology

Loveta Ramyhaider Winaryo and Fitri Yuli Zulkifli (Universitas Indonesia, Indonesia)

Pos2.59 A Stacked Wideband Dielectric Resonator Antenna for 5G Communication Systems

Pan Yin, Qixin Tang, Yongqi Cheng, Ziyang Zhang, Lijia Chen and Shengchang Lan (Harbin Institute of Technology, China)

Pos2.60 A Study on Miniaturization of Millimeter-Wave UWB Monopole Antenna Using Coupling Structure

Nobuyasu Takemura (Chukyo University, Japan)

Pos2.61 A Wideband 2×2 Array Antenna with 45-Degree Half-Power Beamwidth for Angular Characterization at 5-to-6 GHz ISM Band

Indar Surahmat (RWTH Aachen University, Germany & Universitas Muhammadiyah Yogyakarta, Indonesia); Florian Reher (RWTH Aachen University, Germany); Widiasmoro Widiasmoro (Universitas Muhammadiyah Yogyakarta, Indonesia); Dirk Heberling (RWTH Aachen University, Germany)

Pos2.62 Dual-Band Dual Slant-Polarized 5G Base-Station Antenna for Sub-6 GHz Spectrum

Vikrant Singh (5GIC & 6GIC, Institute for Communication Systems (ICS), University of Surrey & Digital Catapult, United Kingdom (Great Britain)); Demos Serghiou and Ali Araghi (University of Surrey, United Kingdom (Great Britain)); Mohsen Khalily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain))

Pos2.63 Dual-Polarized Ultra-Wide-Angle Scattering Metasurface

Sun-Gyu Lee, Jung Ick Moon and Jung-Nam Lee (Electronics and Telecommunications Research Institute, Korea (South))

Pos2.64 Field-of-View-Enhanced Metasurface Lens Based on Dual-Polarized Elements

Nannan Wang (Harbin Institute of Technology, China); Yongjian Ma, Pengcheng Wang, Jingjing Liu and Jinghui Qiu (Harbin Institute of Technology, China)

Pos2.65 Calibration Factor Measurement of RF Power Sensors Using a Vector Network Analyzer

Young Jin Yun (Korea Testing Laboratory, Korea (South))

Pos2.66 Three-Axis Magnetic Induction Sensor for Mid-Range Magnetic Communication in Heterogeneous Media Environments

Jang-Yeol Kim (ETRI, Korea (South)); Hyun Joon Lee (Electronics and Telecommunications Research Institute, Korea (South)); JungHoon Oh (ETRI, Korea (South)); Kye-Seok Yoon (Electronics and Telecommunications Research Institute, Korea (South)); In-Kui Cho (ETRI, Korea (South))

Pos2.67 Radio Propagation Prediction Using Machine Learning and Multiple Side-View Images

Kazuki Yuasa and Koichi Ichige (Yokohama National University, Japan); Tatsuya Nagao and Takahiro Hayashi (KDDI Research, Inc., Japan)

Pos2.68 Monitoring Pollinators with 60 GHz Micro-Doppler Radar

Maryam Norouzi (Postdoctoral Researcher, Trinity College Dublin, Ireland); Pieter Barnard (PhD, Trinity College Dublin, Ireland); Ian Donohue (Professor in Environmental Science and Head of School of Natural Sciences Trinity College Dublin, Ireland); Adam Narbudowicz (Associate Professor, DTU Space, Technical University of Denmark, Denmark)

Pos2.69 Estimation Method for Elevation Angle of Arrival Using a Circular Monopole Array Antenna

Haruto Mouri and Kazuhiro Honda (University of Toyama, Japan)

Pos2.70 Compact High-Directive Electronically-Beam-Switchable Yagi-Uda Antenna for Sub-6G Technology

Raneem Jaafar (Université de Rennes, France); Sylvain Collardey (University of Rennes 1, France); Ala Sharaiha (Université de Rennes & IETR, France)

Pos2.71 Non-Dispersive Jones Matrix for Polarization Multiplexed Holographic Encryption

Mingshuang Hu and Jiaran Qi (Harbin Institute of Technology, China)

Pos2.72 A Dual-Polarized Antenna Array with L-Strip Isolator for Ka-Band Satellite Communication

Sung-Nien Hsieh, Shu-Ming Yang and Ding-Bing Lin (National Taiwan University of Science and Technology, Taiwan)

Pos2.73 Double Ridged Antenna with Dipole Element

Akio Kuramoto (NEC Platforms, Ltd., Japan)

Pos2.74 Variation of Global Ionospheric Parameters on Space-Borne VLF Antenna Characteristics

Yangyong Zhang and Yu Chen (722 Research Institute, CSIC, China); Zhiqiang Chai, Dudu Huang and Huiran Zeng (Xidian University, China); Tong He (Zhejiang Lab, China); Li Kai (Zhejiang University, China)

Pos2.75 Accurate Measurement of Electric Fields near Scattered Objects in the GHz Band Using Electro-Optic (EO) Probes

Takuji Arima and Haku Inanobe (Tokyo University of Agriculture and Technology, Japan); Wataru Yamada (NTT Corporation, Japan)

Pos2.76 Current Ratio Conditions for Optimal Efficiency in a Multi-Tx WPT System with Different Coil Specifications

Hyungchul Kim (National Korea Maritime & Ocean University, Korea (South)); Jae-Ho Lee (Kunsan National University & NONE, Korea (South)); Dong-Wook Seo (National Korea Maritime & Ocean University, Korea (South))

Pos2.77 A Quick and Low-Cost Simulation Approach for the OAM Metasurface with 20 x 20 Unit Cells

YongYu Huang and Wang Cheong (University of Macau, Macao); Kam Weng Tam (University of Macau, China); Hongji Li (Shenzhen University, China); Chao Yu Jiang (University of Macau, Macao); Huawei Lin (University of Macau, China); Ngai Kong (Crosstech Innovation Group Limited, China); Hou-Pan Sio and Man-Chon Si (Macao Science Center, Macao)

Pos2.78 Passive Single-Layer Smart Electromagnetic Skin for Enhancing 5G Signal Coverage in Urban Areas

Zhuo Huang, Guan-Long Huang and Mustafa Khalid Taher Al-Nuaimi (Foshan University, China); Wei Lin (The Hong Kong Polytechnic University, Hong Kong); John Ioannis Yiannis Vardaxoglou (South China University of Technology, China)

Pos2.79 APAA Pattern Reconfiguration Field Test Using an Aircraft for SPS Demonstration

Yoshiyuki Fujino, Ryunosuke Hirose and Hidetoshi Kataoka (Toyo University, Japan); Tomohiko Mitani (Kyoto University, Japan); Koji Tanaka (Japan Aerospace Exploration Agency, Japan)

Wednesday, October 29 15:10 - 17:25

SDC2: Student Design Contest: Category B (Flexible Antenna Design)

Room: Event hall Stage

Wednesday, October 29 15:40 - 17:40

3A4: [OS04] Antenna Measurement Techniques Association (AMTA)

Room A

Chairs: Michitaka Ameya (AIST, Japan), Jin-Seob Kang (KRISS, Korea (South))

15:40 Recent Advances in Plane Wave Generators for Low Frequency Antenna and System Level Testing

Lars Foged (Microwave Vision Italy, Italy)
(Invited Paper)

16:20 One-Port Calibration Technique for Measuring the Reflectivity of Millimeter-Wave Absorbers

Jin-Seob Kang (KRISS, Korea (South))

16:40 Comparison of near-Field to Far-Field Transformations for Bistatic Radar Cross-Section Prediction with Fixed Transmitter Position

Yoshihiko Akamine (Japan Ministry of Defense, Japan)

17:00 Near-Field Reconstruction Using Gaussian Process Regression for Sparse Spherical near-Field to Far-Field Transformation

Michitaka Ameya (AIST, Japan)

17:20 Receiving Performance of the 4-Element Array Antenna-Coupled Electrode Electro-Optic Modulator for 80 GHz Band

Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology, Japan); Michitaka Ameya (AIST, Japan); Masatoshi Onizawa and Masahiro Sato (SEIKOH GIKEN, Japan); Hiroshi Murata (Mie University, Japan)

3B4: [OS19] Innovative antenna systems for the realization of integrated wireless technology

Room B

Chairs: Wei Lin (The Hong Kong Polytechnic University, Hong Kong), Kentaro Murata (Iwate University, Japan)

15:40 Improved Data Transmission Rates in 300-GHz-Band Communication Using Reconfigurable Metalens

Adam Pander and Hibiki Kagami (NTT Device Technology Laboratories, Japan); Hiroshi Hamada and Daisuke Kitayama (NTT Corporation, Japan); Haruka Matsunaga and Hiroyuki Takahashi (NTT Device Technology Laboratories, Japan)

16:00 FDTD Analysis of Characteristics of Reflection from Ocean Debris in Marine FMICW Radar

Takuji Arima and Kyoya Inakawa (Tokyo University of Agriculture and Technology, Japan)

16:20 Study on Improving Target Detection Accuracy of Sensing Using Mobile Communication Systems

Kazuma Tomimoto (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Toshiki Hozen and Shumpei Tabuchi (Softbank Corp., Japan)

16:40 Interference-Free Human-Aware Beamforming for Microwave Wireless Power Transfer

Mao Sekine, Shunto Arai, Kentaro Murata and Naoki Honma (Iwate University, Japan)

17:00 A Radial Line Curl Array Antenna Radiating Gaussian Beam for 24-GHz-Band Fixed Wireless Power Transmission

Yuto Kihara (Institute of science Tokyo, Japan); Gen Nakayama and Takashi Tomura (Institute of Science Tokyo, Japan)

17:20 A Compact Omnidirectional Antenna Array for Integrated Sensing and Communication (ISAC)

Hexiang Kong, Xi Chen and Xu Lin (Xidian University, China)

3C4: [OS22] Recent Advancement of Microwave, Millimeter Wave, and Terahertz Wave Circuits and Applications

Room C

Chairs: Takuichi Hirano (Tokyo City University, Japan), Satoshi Yoshida (Ryukoku University, Japan)

15:40 Development of End-Fire 60-GHz-Band 2×2 Digital Beam Forming Antenna for Built-in Mobile Devices

Takehiro Yamaki and Satoshi Yoshida (Ryukoku University, Japan)

16:00 Measurement of Principle 300 GHz Antenna for Array Antenna Module

Nagahiro Abe, Takuma Nishimura, Hikaru Watanabe, Ichiro Somada, Takumi Nagamine, Akimichi Hirota and Yuta Sugiyama (Mitsubishi Electric Corporation, Japan); Kenichi Okada (Tokyo Institute of Technology, Japan)

16:20 Terahertz Sensing Using an CMOS-RFIC with on Chip Patch Antenna

Ichiro Somada, Yuki Tsukui and Akihito Hirai (Mitsubishi Electric Corporation, Japan); Akinori Taira (Mitsubishi Electric Corp., Japan); Kazuaki Ishioka, Nagahiro Abe and Koji Yamanaka (Mitsubishi Electric Corporation, Japan)

16:40 Stretchable Reconfigurable Intelligent Surfaces with Dynamic Reflection Beam Width Control Functionality at Terahertz Frequency Band

Yuki Tankawa (The University of Osaka, Japan); Yuto Kato (National Institute of Advanced Industrial Science and Technology, Japan); Yosuke Nakata and Atsushi Sanada (The University of Osaka, Japan)

17:00 A Novel Varactor-Tuned Filtenna Array with Frequency Agile and Beam Steering Functions

Masataka Ohira (Doshisha University, Japan); Kazusa Watanabe and Zhewang Ma (Saitama University, Japan); Hiroyuki Deguchi (Doshisha University, Japan)

17:20 SDR-Based Propagation Measurements in Indoor Corridors

Grant Lewis M Bulaong and Takuichi Hirano (Tokyo City University, Japan)

3D4: [OS10] Advanced Techniques for Expanding Millimeter-Wave/Terahertz Network Coverage

Room D

Chairs: Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South)), Minseok Kim (Niigata University, Japan)

15:40 Near-Field Reflector-Assisted Indoor Dual-Beam MIMO Capacity Analysis at Sub-THz Bands

Minghe Mao and Minseok Kim (Niigata University, Japan)

16:00 Wireless Coverage Enhancement via EM Scattering Redistribution

Wonjeong Jo and Hyunjae Shin (Pohang University of Science and Technology (POSTECH), Korea (South)); Donggeun An and Myoungsun Kim (Pohang University of Science and Technology, Korea (South)); Daehyeon Kim (POSTECH, Korea (South)); Youngno Youn (Incheon National University, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))

16:20 Experimental Evaluation of Zone Plate Reflector for 300 GHz Coverage Enhancement

Cong Minh Hieu Le, Hang Song, Nopphon Keerativoranan and Andrey S Andrenko (Institute of Science Tokyo, Japan); Minghe Mao and Minseok Kim (Niigata University, Japan); Jun-ichi Takada (Institute of Science Tokyo, Japan)

16:40 Inverse-Designed Holographic Surfaces for Multi-Focus Spatial Beamforming with Flexible Focal Region and Polarization Control

Jihwan Lee (Pohang University of Science and Technology (POSTECH), Korea (South)); Sirous Bahrami (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))

17:00 A Reconfigurable Multi-Band Radio-Wave Absorber for Beyond 5G/6G Applications

Sangyeop Lee and Motohiro Takayasu (Institute of Science Tokyo, Japan); Shinsuke Hara (National Institute of Information and Communications Technology, Japan)

17:20 Octave-Bandwidth Resistive Absorber for Multi-Band Radar and Communication Systems

Youngno Youn (Incheon National University, Korea (South)); Daehyeon Kim (POSTECH, Korea (South)); Donggeun An (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))

3E4: [OS16] Advanced Antenna and RF Technologies for Satellite Communications and Remote Sensing (UNIST RRC Special Session)

Room E

Chairs: Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South)), EunMi Choi (UNIST, Korea (South))

15:40 W-Band Circularly Polarized Antenna Array Using Sequentially Coupled Feed Structure for Satellite Communications

Chang Hee Lee (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South))

16:00 A 28-GHz GaN Front-End Module with a Deep Back-off Doherty Power Amplifier

Sangjin Yoo and Ockgoo Lee (Pusan National University, Korea (South))

16:20 A 5.74-8.02 GHz Area-Efficient and Low-Noise CMOS Cross-Coupled LC-VCO

Hyogyoun An, Hyeonjun Nam, Sungjin Kim and Heein Yoon (Ulsan National Institute of Science and Technology (UNIST), Korea (South))

16:40 A Systematic Study of Field Electron Emission Properties of MXene Film for Cold-Cathode Applications

Si Eun Han and Jaeun Park (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); Mincheal Kim and EunMi Choi (UNIST, Korea (South)); Jun Yeop Lee and Soon-Yong Kwon (Ulsan National Institute of Science and Technology (UNIST), Korea (South))

17:00 Interface Carbon Defect Reduction in SiC Oxides for Reliable SiC RF Devices

Yeong Jin Ahn, Yun Ho Lee, Su Hyun Park, Jeong Wook Kim and Cheul Hyun Yoon (POSTECH, Korea (South)); Byoung Don Kong (Pohang University of Science and Technology & POSTECH, Korea (South))

17:20 Dual-Output RF Energy Harvester with Adaptive Energy Buffering for Enhanced Power Availability Under Intermittent Input for PPG Sensors

Mun-Jung Cho, Seung-Ju Lee, Yeon-Woo Jeong, Jong-Hun Kim, Min-Sik Kim, Myeong-Ho Kim, Geon Kim, Min-Gyu Jeong and Dong-Chan Lee (Pohang University of Science and Technology (POSTECH), Korea (South)); Se-Un Shin (POSTECH, Korea (South))

Wednesday, October 29 15:40 - 17:20

3F4: [OS23] IEEE AP-S and ISAP 2025 Young Professional Special Session

Room F

Chairs: Hasan Abbas (University of Glasgow, United Kingdom (Great Britain)), Takashi Tomura (Institute of Science Tokyo, Japan)

15:40 Design of a Folded Reflectarray Antenna with High Aperture Efficiency and Low Sidelobes

Makoto Sano (Yokohama National University, Japan)

16:05 Study on Materials for Weight Reduction of Lens Antennas for HAPS Ground Stations

Takuya Okura and Hiroyuki Tsuji (National Institute of Information and Communications Technology, Japan)

16:30 Radar Fusion for Enhanced Resident Monitoring in Long-Term Care Facilities

Hajar Abedi and Ahmad Ansariyan (University of Waterloo, Canada)

16:55 915MHz Wireless Power Transfer System for Supercapacitor-Energized IoT Terminals

Wei Lin (The Hong Kong Polytechnic University, Hong Kong)

Thursday, October 30

Thursday, October 30 9:00 - 10:40

4A1: Reflector, Reflectarray and Lens Antennas

Room A

Chairs: Takeshi Fukusako (Kumamoto University, Japan), Hiroyasu Sato (Tohoku University, Japan)

9:00 *Design and Analysis of Deployable Mesh Reflector Antennas for Satellite Applications*

Changhyeon Im and Hosung Choo (Hongik University, Korea (South))
(Invited Paper)

9:40 *A Beam-Forming Method for 1-Bit Time-Modulate Reflectarray at Carrier Frequency*

Xianbo Cao (Xidian University, China); Wen Wu (Tohoku University, Japan); Xiaosong Liu, Tao Hong and Wen Jiang (Xidian University, China)

10:00 *Design and Experimental Verification of SF₆-Gas Infilled Dual-Reflector Antenna for HPM System*

Dong-Hoon Lee (Chungnam National University, Republic of Korea, Korea (South)); Wonkyo Kim (Chungnam National University, Korea (South)); Min-Seok Cha (Chung-Nam National University, Korea (South)); Junyeon Kim and Donggeun Seo (Agency for Defense Development, Korea (South)); Ick-Jae Yoon (Chungnam National University, Korea (South))

10:20 *New Foaming 3D Printing Filaments with Adjustable Low Permittivity for Printing Gradient Index (GRIN) Lens Antennas*

Oscar Moschner, Volker Wienstroer, Markus Heinrichs and Rainer Kronberger (TH Cologne University of Applied Sciences, Germany)

4B1: [OS01] Advanced Antenna and EMC Measurement Technologies for Microwave and Millimeter Wave Systems

Room B

Chairs: Xiaoming Chen (Xi'an Jiaotong University, China), Kun Li (The University of Electro-Communications, Japan)

9:00 *Experimental Verification of OTA Testing Method for Test Zone Extension*

Takumi Omoto and Kazuhiro Honda (University of Toyama, Japan); Kun Li (The University of Electro-Communications, Japan)

9:20 *RCS Measurements of Single Parabolic Cylindrical Compact Range with Linear Array Feed*

Ke Yang, Zhengpeng Wang and Zhiming Luo (Beihang University, China)

9:40 *Interpolation Techniques for Sparse Spherical near-Field Measurements: a Comparative Study*

Kitiphon Sukpreecha, Titipong Lertwiriayaprapa, Danai Torrungrueng and Kittisak Phaebua (King Mongkut's University of Technology North Bangkok, Thailand)

10:00 *Fast Nonlinear Reconstruction for Radiation Patterns in Reverberation Chamber with Full Data*

Mengsheng Wang and Kuiwen Xu (Hangzhou Dianzi University, China); Fangyun Peng (Xian Jiaotong University, China); Xiaoming Chen (Xi'an Jiaotong University, China)

10:20 *Open-Boundary Quad-Ridged Horn Antenna Loaded with Absorbing Materials*

Miaoshan Song and Zhengpeng Wang (Beihang University, China); Guokai Jiang (China Automotive Technology and Research Center Co. Ltd., China)

4C1: [OS09] Recent Advances and Applications of Metamaterials and Metasurfaces

Room C

Chairs: Yongjune Kim (The University of Suwon, Korea (South)), Ryuji Kuse (Kumamoto University, Japan)

9:00 *Constitutive Method for Topological Waveguides Using Two-Dimensional T- and π -Type Rhombic Unit Cell Structures*

Tsutomu Nagayama (Kagoshima University, Japan)

9:20 *Leveraging Symmetries for the Dispersion Analysis of Open 2D-Periodic Structures*

Jesus Maria Jimenez-Suarez (KTH Royal Institute of Technology, Sweden); Sergio Garcia-Martinez (Universidad Politécnica de Madrid, Spain); Francisco Mesa (University of Seville, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)

9:40 *Forward Scattering Enhancement of Monopole Antenna with Huygens' Metasurface*

Hiroshi Hashiguchi and Naobumi Michishita (National Defense Academy, Japan)

10:00 *Independent Control of Dual-Polarized Beams in Reflectarray Antenna with Low Cross-Polarization Design*

Yosuke Maruno (Kumamoto University, Japan); Makoto Sano (Yokohama National University, Japan); Takeshi Fukusako and Ryuji Kuse (Kumamoto University, Japan); Kazuma Tomimoto, Toshiki Hozen and Tomonori Ikeda (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan)

10:20 *Prototyping of the Electromagnetic Scattering Sheet in 300 GHz Band*

Lira Hamada (National Institute of Information and Communications Technology, Japan); Yasutaka Murakami (UEC, Japan); Jerdvisanop Chakarothei and Katsumi Fujii (National Institute of Information and Communications Technology, Japan)

4D1: [OS03] Underwater Wireless Technology Using Electromagnetic Waves

Room D

Chairs: Miyuki Hirose (Kyushu Institute of Technology, Japan), Nozomu Ishii (Niigata University, Japan)

9:00 *Maximum Distance Verification for Undersea Radio Frequency Communication Between Two Loop Antennas Using Wavelet-OFDM*

Juan Carlos Rosales Rodriguez, Tohlu Matsushima, Yuki Fukumoto, Kazuhiro Eguchi and Daisuke Nakayama (Kyushu Institute of Technology, Japan)

9:20 *Underwater Robot Navigation Under Sea Ice Using Very Low Frequency Electromagnetic Waves in the Polar Regions*

Hiroshi Yoshida (JAMSTEC & IACE, Japan); Masaharu Takahashi and Shinnosuke Sakaya (Chiba University, Japan); Nozomu Ishii (Niigata University, Japan); Qiang Chen (Tohoku University, Japan)

9:40 *Electromagnetic Propagation in Seawater and Hybrid Air-Seawater Environments Using a Hollow Cylindrical Concrete Structure*

Qiaowei Yuan (Tohoku Institute of Technology, Japan)

10:00 *Applicable Range of Pseudo-Scale Models for Air-Sea Two-Layer Problems Using Sommerfeld Integral*

Akio Sejimo and Nozomu Ishii (Niigata University, Japan)

10:20 *Scaled Transmission Measurement Between Dipole Antennas in Proximity to PVC Pipe in Seawater*

Naoki Kuzu and Nozomu Ishii (Niigata University, Japan); Masaharu Takahashi (Chiba University, Japan); Qiaowei Yuan (Tohoku Institute of Technology, Japan); Qiang Chen (Tohoku University, Japan); Hiroshi Yoshida (JAMSTEC & IACE, Japan)

4E1: Millimeter-wave and Terahertz Antennas I

Room E

Chairs: Ming Che (Kyushu University, Japan), Shintaro Hisatake (Gifu University, Japan)

9:00 Photonic-Integrated InGaAs/SiC UTC-PD-Fed Microstrip Stub Array Antenna for 300-GHz Fan-Beam Generation

Ming Che, Yoshiki Kamiura, Ryo Doi and Kazutoshi Kato (Kyushu University, Japan)

9:20 A Tile Type V-Band 4-Element Circular Polarized Patch Array Antenna with Matching Circuit

Welday Gerezgiher Berhe, Koki Furuuchi, Tomoyuki Furuichi, Satoshi Tsukamoto and Noriharu Suematsu (Tohoku University, Japan)

9:40 An Experimental Verification of 300-GHz Band Laminated Resonator Antenna

Jihoon Kim, Hiroshi Uchimura and Nobuki Hiramatsu (Kyocera Corporation, Japan); Kunio Sakakibara and Yoshiki Sugimoto (Nagoya Institute of Technology, Japan)

10:00 Expansion of Sheet LAN Alignment Margin by Using Branched Structure Waveguide Probe

Shintaro Nakamura, Hayato Sasaki and Akihiko Hirata (Chiba Institute of Technology, Japan)

10:20 Contactless BGA Interconnection of Gap Waveguide MLW Slot Array Antenna for E-Band Automotive Radar Applications

Juan Luis Albadalejo Lijarcio (Chalmers University of Technology, Sweden & Gapwaves AB, Sweden); Abbas Vosoogh and Carlo Bencivenni (Gapwaves AB, Sweden); Ashraf Uz Zaman (Chalmers University of Technology, Sweden)

4F1: Part1: Technical session [OS25] Highlighting Research Achievements Beyond Gender

Room F

Chairs: Fauziahanim Che Seman (Universiti Tun Hussein Onn Malaysia, Malaysia), Qiaowei Yuan (Tohoku Institute of Technology, Japan)

9:00 Phased Arrays in Waveguide Technology for Low Earth Orbit (LEO) Active Payloads

Esteban Menargues and Santiago Capdevila (SWISSto12, Switzerland); María García-Vigueras (IETR-INSa Rennes, France)

9:25 Wide-Power-Range RF Harvester with Constant Output Voltage for Autonomous Sensing Systems

Lei Guo, Kuo Guan, Xuwang Li and Mengxi Yan (Dalian University of Technology, China); Wenwen Yang (Nantong University, China); Ke Wu (Polytechnique Montréal, Canada)

9:50 Design of Triple Band Microstrip Antenna for 5G Network Applications in Indonesia

Nadya Rizka Salsabila (University of Indonesia, Indonesia); Fitri Yuli Zulkifli (Universitas Indonesia, Indonesia)

10:15 Design Method of Normal-Mode Helical Antenna at 10MHz for Undersea Radio Communication

Muhammad Syamim Fitri Othman and Kamilia Kamardin (Universiti Teknologi Malaysia, Malaysia); Yoshihide Yamada (Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia); Idrin Pasya (University of Aizu, Japan); Nozomu Ishii (Niigata University, Japan); Masaharu Takahashi (Chiba University, Japan)

Thursday, October 30 11:00 - 12:40

4A2: Antenna Theory and Design

Room A

Chairs: Masataka Ohira (Doshisha University, Japan), Naoki Sakai (Kanazawa Institute of Technology, Japan)

11:00 *Design of High Gain and Low Scattering Antennas*

Ying Liu (Xidian University, China)
(Invited Paper)

11:40 *Design of Low-Profile Dual-Polarized Metasurface Antenna Using Characteristic Mode Analysis*

Haoyang Chen and Xiang Zhang (University of Science and Technology of China, China); Jun Gu (University of Science and Technology of China, China & USTC, China); Weidong Chen (University of Science & Technology of China, China); Chang Chen (University of Science and Technology of China, China)

12:00 *Circular Polarization Characteristics of a High Impedance Rampart-Type Microstrip Line Array Antenna*

Fumiaki Matsukura, Keisuke Noguchi, Kenji Itoh and Naoki Sakai (Kanazawa Institute of Technology, Japan)

12:20 *A Dual-Band High-Impedance Antenna for WPT Applications*

Kei Takahashi and Keisuke Noguchi (Kanazawa Institute of Technology, Japan)

4B2: [OS01] Advanced Antenna and EMC Measurement Technologies for Microwave and Millimeter Wave Systems

Room B

Chairs: Xiaoming Chen (Xi'an Jiaotong University, China), Kun Li (The University of Electro-Communications, Japan)

11:00 *Fiber Bragg Grating-Assisted Differential EO Sensing for 450 GHz Antenna near-Field Measurement*

Wataru Kumazawa, Kento Ishihara, Daiki Kojima, Shinya Ochi, Yusuke Tanaka and Shintaro Hisatake (Gifu University, Japan)

11:20 *On the Robustness of TwIST-Based Compressed Sensing for Spherical near-Field Measurements*

Fangyun Peng (Xian Jiaotong University, China); Xiaoming Chen (Xi'an Jiaotong University, China)

11:40 *Reduction of Planar near-Field Truncation Error Using a Three-Dimensional Optimization Method*

Junhao Zheng (China); Guan-Long Huang (Foshan University, China); Xiaoming Chen (Xi'an Jiaotong University, China)

12:00 *Over-the-Air Testing of BAN Diversity Antennas in 4G Downlink Frequency Band*

Yuhei Oda and Haruto Utsushigawa (The University of Electro-Communications, Japan); Takumi Omoto and Kazuhiro Honda (University of Toyama, Japan); Kun Li (The University of Electro-Communications, Japan)

12:20 *A Suitable Metric for Maximum Received Power of Deep-Tissue Implantable Devices*

Maoyuan Li (Institute of Science Tokyo, Japan); Mingxiang Gao (EPFL, Switzerland & IT'IS Foundation, Switzerland); Anja K. Skrivervik (EPFL, Switzerland); Takahiro Aoyagi (Institute of Science Tokyo, Japan)

4C2: [OS26] Electromagnetic field analysis and industry applications

Room C

Chairs: Kenichi Ishida (Kyushu Sangyo University, Japan), Yukihiisa Suzuki (Tokyo Metropolitan University, Japan)

11:00 *Reconstruction of a Dielectric Cylinder by Applying a Physics-Informed Neural Network*

Kenichi Ishida and Tsuyoshi Matsuoka (Kyushu Sangyo University, Japan)

11:20 *Physics-Informed Neural Network Formulation for Electromagnetic Beam Propagation*

Kazuhiro Fujita (Saitama Institute of Technology, Japan)

11:40 *Analysis of Resonator Structure Constructed by Two-Dimensional MDM Plasmonic Waveguide Using Transmission Line Circuit Model*

Yoshihiro Naka (University of Miyazaki, Japan); Masahiko Nishimoto (Kumamoto University, Japan); Mitsuhiro Yokota (University of Miyazaki, Japan)

12:00 *Stability Condition of the Three-Dimensional FDTD Method Based on the Iterated Crank-Nicolson Scheme*

Koshin Miwatashi and Jun Shibayama (Hosei University, Japan)

12:20 *Evaluation of Vortex Dichroism Spectroscopy Using MoM for Spiral Thin Conductor Model*

Hideki Kawaguchi (Muroran Institute of Technology, Japan); Koichi Matsuo (Hiroshima University, Japan); Chenxu Wang (National Institute for Fusion Science, Japan); Masahiro Katoh (Institute of Molecular Science, China); Hiroaki Nakamura (National Institute for Fusion Science & Nagoya University, Japan)

4D2: [OS03] Underwater Wireless Technology Using Electromagnetic Waves

Room D

Chairs: Nozomu Ishii (Niigata University, Japan), Hiroshi Yoshida (JAMSTEC & IACE, Japan)

11:00 *Design of an LCC-s Wireless Power Transfer System for Sea Water with Eddy Current Loss*

Sungryul Huh (Korea Advanced Institute of Science and Technology (KAIST) & COILS, Korea (South)); Seongho Woo, Hyunsoo Lee, Seungmin Ha and Seungyoung Ahn (Korea Advanced Institute of Science and Technology, Korea (South))

11:20 *Loss Analysis of Wireless Power Transfer System Using Litz Wire Coil in Seawater*

Sora Anzai (Tokai University, Japan); Atsuya Mizota (Tokai Univ, Japan); Mamiko Inamori (Tokai University, Japan)

11:40 *A Study of Antenna Configuration for Underwater MIMO Communication Systems Based on Capacity Analysis*

Miyuki Hirose (Kyushu Institute of Technology, Japan)

12:00 *An Electrically Small Unidirectional Underwater Antenna Using a Huygens Source*

Takashi Kawamura (Sony Corporation, Japan)

12:20 *Normal-Mode Helical Antenna Design at 1 MHz for Undersea Application*

Badrul Amin Azahari (Universiti Teknologi Malaysia & Malaysia-Japan International Institute of Technology, Malaysia); Yoshihide Yamada (Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia); Kamilia Kamardin (Universiti Teknologi Malaysia, Malaysia); Idnin Pasya (University of Aizu, Japan); Nozomu Ishii (Niigata University, Japan); Masaharu Takahashi (Chiba University, Japan)

4E2: [OS12] Small and Low-Profile Antennas

Room E

Chairs: Chai-Eu Guan (Nagasaki University, Japan), Keisuke Noguchi (Kanazawa Institute of Technology, Japan)

11:00 *Design of a Low-Profile Wi-Fi 7 MIMO Antenna for a Laptop Applications*

Wei-Zhan Zeng and Hsin-lung Su (National Pingtung University, Taiwan)

11:20 *Impact of Loss Resistance on the Radiation Efficiency of Small Antennas Excited by Folded Structure*

Daiki Miyamori and Keisuke Noguchi (Kanazawa Institute of Technology, Japan); Keisuke Fujita (Maebashi Institute of Technology, Japan)

11:40 *Simulation of Pattern Reconfigurable Antenna Composed of Patch and Monopole Elements*

Naoki Takamura, Shimpei Akimoto and Kengo Nishimoto (Mitsubishi Electric Corporation, Japan)

12:00 *Design of a Metasurface Reflector to Enhance the Axial Ratio Magnitude of a Compact Crossed-Dipole Antenna*

Chai-Eu Guan and Takafumi Fujimoto (Nagasaki University, Japan)

12:20 *Characteristics of Inverted L Antenna Fabricated with Inkjet Printed PET Sheet*

Tsuyoshi Matsuoka (Kyushu Sangyo University, Japan); Mitsuo Taguchi (Nagasaki University, Japan)

4F2: Part2: D&I session "Sharing Ideas on Gender Innovation"

Room F

Chairs: Fauziahanim Che Seman (Universiti Tun Hussein Onn Malaysia, Malaysia), Qiaowei Yuan (Tohoku Institute of Technology, Japan)

Thursday, October 30 12:40 - 13:10

TS4: Technical Seminar 4: Keysight technologies

Room: Event hall Stage

Thursday, October 30 13:10 - 13:40

TS5: Technical Seminar 5: Optenni Ltd

Room: Event hall Stage

Thursday, October 30 13:40 - 15:20

Pos3: Poster Session 3

Pos3.1 *The Degree of Spatial Coherence of Crossly Polarized EM-Waves in Continuous Random Medium*

Yukihisa Nanbu (National Institute of Technology, Ariake College, Japan); Mitsuo Tateiba (Kyushu University, Japan)

Pos3.2 *Noise Source Separation in Pulse-Frequency Modulation-Controlled DC-DC Converters Using near-Field Features*

Hiroyasu Sano (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Kenta Umebayashi (Tokyo University of Agriculture and Technology, Japan); Satoshi Suzuki, Hidekatsu Sasaki and Yasuaki Kaneda (Tokyo Metropolitan Industrial Technology Research Institute, Japan)

Pos3.3 *Distributing the Aperture: Signal Localization with a Space-Based Extremely Large Array*

Dany Mestas and Thomas Delamotte (Bundeswehr University Munich, Germany); Hervé Legay (Thalès Alenia Space, France); Raúl Regada Alvarez (Thales Alenia Space, Spain); Andreas Knopp (Bundeswehr University Munich, Germany)

Pos3.4 *Experimental Study of Polarimetric Scattering Diversity Effect on MIMO Imaging Radar*

Dion Hayu Fandiantoro, Takeshi Fukusako and Ryuji Kuse (Kumamoto University, Japan); Kazuma Tomimoto, Toshiaki Hozen and Tomonori Ikeda (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan)

Pos3.5 *Broadband Vivaldi Antenna Design with in-Band RCS Suppression*

Yuan-Chang Hou and Yu-Lun Huang (National Ilan University, Taiwan)

Pos3.6 *Quasi-Analytical Model for Space-Time Periodic Structures Controlled by Diodes*

Carlos Molero and Juan Rafael Sanchez-Martinez (University of Granada, Spain); Mario Pérez-Escribano (Universidad de Málaga, Spain); Pablo Padilla (University of Granada, Spain); Antonio Alex-Amor (University of Pennsylvania, USA)

Pos3.7 *Design of a Microstrip Antenna Array Fed by Inclined Slots on the Broad Wall of a Rectangular Waveguide with Standing-Wave Excitation for 45-Degree Inclined Linear Polarization*

Kenshi Inoue and Yuichi Kimura (Saitama University, Japan)

Pos3.8 *A C/Ka-Band Groove-Loaded Spline Taper Horn with Low-Cross-Polarization*

Hiroki Nishida, Masataka Ohira and Hiroyuki Deguchi (Doshisha University, Japan)

Pos3.9 *Estimation of the Number of Signals Using High SNR-Extended MEEV Considering Amplitude and Phase Errors in Antenna Elements*

Yuto Nakajima, Yoshiki Takahashi and Tadashi Oshima (Mitsubishi Electric Corporation, Japan)

Pos3.10 *4-Subarray MIMO Monopole Antenna with Beam Steering Function*

Seiya Katsuragawa and Kazuhiro Honda (University of Toyama, Japan)

Pos3.11 *Effects of Magnitude Dynamic Range Constraints on MIMO Wireless Power Transfer Efficiency*

Young-Seok Lee, Jungsuek Oh and Sangwook Nam (Seoul National University, Korea (South))

Pos3.12 *Toward ADAS Full Autonomy: "Shift-Left" Solution for in-Cabin Safety Radar Development*

Tung Nguyen (Ansys Inc, Japan); Arien Sligar (Ansys Inc., USA)

Pos3.13 *GNSS Multi-Band Signal Parameter Estimation Method Using Array Signal Processing*

Seina Otani (Meiji University, Japan); Tsubasa Terada and Ryuhei Takahashi (Mitsubishi Electric Corporation, Japan); Takeshi Amishima (Meiji University, Japan)

Pos3.14 Quantum Annealing-Based Optimization of on-Vehicle Antenna Placement

Yuika Nakayama (University of Saga, Japan); Yuto Shimada and Eisuke Nishiyama (Saga University, Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Toshiki Hozen and Kazuma Tomimoto (Softbank Corp., Japan); Ichihiko Toyoda (Saga University, Japan)

Pos3.15 Research on RCS Reduction Based on Electromagnetic Surface

Zhichao Miao (Harbin Institute of Technology, China); Wei Chen (China Airborne Missile Academy, China); Min Zhang (Harbin Institute of Technology weihai, China)

Pos3.16 High-Selectivity Frequency-Selective Absorber with an Ultra-Narrow Upper Transition Band

Shen Meng, Qingxin Guo, Jinbo Liu and Zengrui Li (Communication University of China, China)

Pos3.17 Experimental Validation of 2.4 GHz Microwave Sensor for Hepatitis B Virus Detection

Yusnita Rahayu, Meilita Kurniati, Anhar Anhar, Huriatul Masdar and Maya Savira (Universitas Riau, Indonesia)

Pos3.18 A Dual-Band Circularly Polarized Antenna Architecture for Wearable Products

Haohuan Wang (Dalian University of Technology, China); Shaoshu Sha and Yan Shi (Xiaomi Corporation, China); Hui Li (Dalian University of Technology, China)

Pos3.19 Design of Patch Phased Array Antenna with Multi-Layer Dielectric in Metal Cavity

Yao Yang, Lingkai Zhang, Guangwei Yang and Jian-ying Li (Northwestern Polytechnical University, China)

Pos3.20 Time-Domain Gating Optimization for Stationary Free-Space Radome Measurement

Ji-Min Park and Kyoung Hun Kim (Gyeongsang National University, Korea (South)); Wang-Sang Lee (Gyeongsang National University (GNU), Korea (South))

Pos3.21 Reflection Properties of Meta-Surface Reflector with Short Posts

Shinya Endo and Mitoshi Fujimoto (University of Fukui, Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Kazuma Tomimoto and Tomonori Ikeda (Softbank Corp., Japan)

Pos3.22 Beamforming Performance of E-MIMO Approach from near-Field to Far-Field in Array Antennas

Jintai Wu and Qiaowei Yuan (Tohoku Institute of Technology, Japan)

Pos3.23 Design of Expandable Transmitter for Extended Range in Omnidirectional Wireless Power Transfer

Seong-Jin Kim (KAIST, Korea (South)); Yeong-Ju Seo (Korea Advanced Institute of Science and Technology, Korea (South)); Hyo-Won Lee (KAIST, Korea (South)); Sungjun Cho (Korea Advanced Institute of Science and Technology, Korea (South)); Jong-Won Yu (KAIST, Korea (South))

Pos3.24 3D Positioning Method of Human-Body Using SISO-CSIs Among Multiple Wi-Fi Devices

Daiki Nagao, Kentaro Kikuta, Naoki Honma and Kentaro Murata (Iwate University, Japan); Takeshi Nakayama and Shoichi Iizuka (Panasonic Corporation, Japan)

Pos3.25 Analytical Optimization of Metal-Pattern Metasurfaces Using Equivalent Circuit Models

Ilyes Moufid, Paula Aguilera and Justine Labat (CEA, France)

Pos3.26 A W-Band Planar Luneburg Lens Antenna with Multiple Sum and Difference Beams

Jingrui Xu (Harbin Institute of Technology, China); Nannan Wang (Harbin Institute of Technology, China); Pengcheng Wang, Guowei Xu and Dongqing Liu (Harbin Institute of Technology, China)

Pos3.27 Multi-Port Center-Fed Slotted Waveguide Antenna Array for Power Combining

Chuanming Zhu, Haikun Jia, Wei Deng and Baoyong Chi (Tsinghua University, China)

Pos3.28 *Post-Wall Waveguide Series-Fed Sidelobe-Suppression Slot Subarray Antenna for Millimeter-Wave Radar*

Hayato Sato, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan)

Pos3.29 *Dielectric Flat 3D-Printed Luneburg Lens with Circular Polarization for Satellite Applications*

Kevin Pulgar and Marco Cruz (Pontificia Universidad Católica de Valparaíso, Chile); Francisco Pizarro (Pontificia Universidad Católica de Valparaíso, Chile)

Pos3.30 *Compact Coplanar Waveguide Fed Two-Port Patch Antenna Using Thin Flexible Substrate for 26/28GHz Millimeter-Wave Band*

Ainur Fasihah Mohd Fazilah (Universiti Malaysia Perlis, Malaysia); Saidatul Norlyana (Universiti Malaysia Perlis & Advanced Communication Engineering Centre of Excellence (CoE), Malaysia); Azremi Abdullah Al-Hadi, Mohd Syahir Ahmad Azhari, Fwen Hoon Wee and Surentiran Padmanathan (Universiti Malaysia Perlis, Malaysia); Che Muhammad Nor Che Isa (University of Malaysia Perlis, Malaysia); Yen San Loh (Jabil Circuits Sdn. Bhd., Malaysia); Muhammad Syahir Mahyuddin, Lai Ming Lim and Zambri Samsudin (Jabil Circuit Inc, Malaysia); Idris Mansor (Jabil Circuits Sdn. Bhd., Malaysia)

Pos3.31 *Compact Dual-CP Waveguide Polarizer with a Wire-Grating Dual Feed*

Martin Simak and Ding-Bing Lin (National Taiwan University of Science and Technology, Taiwan); Pavel Hazdra (Czech Technical University in Prague, Czech Republic)

Pos3.32 *Design Methodology for Optimized Variable-Thickness Airborne Radomes*

Min-Seok Cha (Chung-Nam National University, Korea (South)); Dong-Hoon Lee (Chungnam National University, Republic of Korea, Korea (South)); Jong-Gyun Baek, Dong-Kyun Lee and Youngwan Kim (LIG Nex1, Korea (South)); Ick-Jae Yoon (Chungnam National University, Korea (South))

Pos3.33 *A Study of Ceramics-Less Dual-Band Antenna for GNSS Systems Based on MSA Using Printed Coils*

Kenta Tsurubuchi (YOKOWO Company Limited, Japan); Takeshi Sampo (Yokowo Co Ltd, Japan); Kenichi Yamada (YOKOWO CO. LTD, Japan); Hiroshi Iwai (Yokowo, Japan); Yuichi Kimura (Saitama University, Japan)

Pos3.34 *Radiation Characteristics of Wullenweber Antenna with ULPIL Element Antenna*

Mitsuo Taguchi (Nagasaki University, Japan); Haruo Kawakami (Later Sophia University, Japan)

Pos3.35 *A Novel Coplanar Waveguide Feeding Method for Tapered Slot Antennas*

Mayumi Matsunaga (Shizuoka University, Japan)

Pos3.36 *Multi-Activation Fluid Antenna System with a Single RF Chain for Fast Multi-User Access*

Jiewei Huang (Shenzhen Technology University SHEN, China); Huan Meng and Baiyang Liu (Shenzhen Technology University, China); Kin Fai Tong (Hong Kong Metropolitan University, Hong Kong)

Pos3.37 *Study on Implementation of Vehicle Antenna for NTN Applications*

Tomonori Ito and Keisuke Noguchi (Kanazawa Institute of Technology, Japan)

Pos3.38 *Slot 4G MIMO Dual-Antenna for Metal-Frame Smartphones*

Shu-Chuan Chen (National Defense University Chung Cheng Institute of Technology, Taiwan & Chung Cheng Institute of Technology, Taiwan); Kuang-Hsiung Tan (National Defense University & Chung Cheng Institute of Technology, Taiwan); Yung-Lung Lee (National Defense University Chung Cheng Institute of Technology, Taiwan)

Pos3.39 *Metasurface Holography with Arbitrary-Bit Discrete Phase*

Zeming Kong, Jiaran Qi, Yiding Liu and Wentao Liang (Harbin Institute of Technology, China); Yizhi Zhang (Harbin Institute of Technology, China); Wang Yuzhong, Mingshuang Hu, Yongjian Ma, Qirui Yu and Yu Axiang (Harbin Institute of Technology, China)

Pos3.40 Design of a Double-Layered Varactor-Loaded Dual-Band Microstrip Antenna Fed by an L-Probe with a Miniaturized Shorted and Slitted Element

Takahito Seta and Yuichi Kimura (Saitama University, Japan)

Pos3.41 Dual-Polarized Compact Shared-Aperture Array Antenna with Functional Reuse

Miao Lv and Guo Weisen (Xidian University, China); Tong Wu (Xi'dian University, China); Zhiya Zhang (Xidian University, China)

Pos3.42 Testing LoRa Communication Between Underground and Above Ground Modules

Patryk Kalkowski and Aleksander Krupa (Gdansk University of Technology, Poland); Mateusz Rzymowski (Gdansk University of Technology & WiComm Center of Excellence, Poland); Luiza Leszkowska, Krzysztof Nyka and Lukasz Kulas (Gdansk University of Technology, Poland)

Pos3.43 Antenna Size for Multi-Swath Observation-Oriented Small SAR Satellites

Ryo Natsuaki (The University of Tokyo, Japan); Michio Takikawa and Hirofumi Saito (Nihon University, Japan); Akira Hirose (The University of Tokyo, Japan)

Pos3.44 Fundamental Study on Computational Microwave Imaging Using Conducting-Reflector-Backed Dipole Metasurface

Nanaho Kawata (Antenna Giken Co, Ltd., Japan & Tohoku University, Japan); Qiang Chen (Tohoku University, Japan)

Pos3.45 Adaptive Multiple-Input Multiple-Out Radar Array Beamformer with an Advanced Generalized Sidelobe Canceller

Cheng-Jie Wang and Ju-Hong Lee (National Taiwan University, Taiwan)

Pos3.46 Human Motion Classification Using Multilink Millimeter-Wave Channels

Yupeng Wang and Minseok Kim (Niigata University, Japan)

Pos3.47 Triple-Band Metasurface Absorber

Qiongyan Lei (Harbin Institute of Technology, China); Yao Xi Huang (Harbin Insitute of Technology, China); Shengchang Lan, Yueyi Yuan and Kuang Zhang (Harbin Institute of Technology, China)

Pos3.48 Frequency-Selective Polarization Converters Based on CT and CQ Coupling Topologies

Hang Yuan, Kai-Ran Xiang and Fu-Chang Chen (South China University of Technology, China)

Pos3.49 Design of a Flexible Metasurface Absorber Using Textile Materials for X-Band Applications

In-June Hwang (Korea Research Institute of Standards and Science (KRISS), Korea (South)); Young-Pyo Hong and In-Ho Lee (Korea Research Institute of Standards and Science, Korea (South)); Jinwoo Park (Agency for Defense Development, Korea (South)); Dal-Jae Yun (Korea Research Institute of Standards and Science, Korea (South))

Pos3.50 Dual Circularly Polarized Filtering Antenna Using a Quarter Wavelength Resonator

Dwi Astuti Cahyasiwi (Universitas Muhammadiyah HAMKA, Indonesia); Dian Widi Astuti (Universitas Mercu Buana, Indonesia); Yus Natali (Universitas Telkom, Indonesia); Syah Alam (Universitas Trisakti, Indonesia); Rosalina (Universitas Muhammadiyah HAMKA, Indonesia)

Pos3.51 Dielectric Superstrate Design for High-Gain 6x26 Slotted Waveguide Array Antenna

You Seok Yeoh (Korea Maritime & Ocean University, Korea (South)); Min Cheol Paek, SeungJun Kim and Seong Been Jang (National Korea Maritime & Ocean University, Korea (South)); Kyeong-sik Min (Korea Maritime and Ocean University, Korea (South))

Pos3.52 A Low-Cost and Compact 38 GHz SIW Yagi Antenna Array with Integrated Power Divider

Ming-An Chung, Zhi-xuan Zhang, Jin-Hong Chou, Chia Chun Hsu, Yi-Ju Yao and Chia-Wei Lin (National Taipei University of Technology, Taiwan)

Pos3.53 Design of Low RCS Dual Circularly Polarized Antenna Using Characteristic Mode Analysis

YongQi Cheng, Ziyang Zhang, Pan Yin, Qixin Tang, Lijia Chen and Shengchang Lan (Harbin Institute of Technology, China)

Pos3.54 Multi-Axis Bendable Rigid-Flexible X-Band Antenna Array Based on Corrugated Microstrip Circular Patch Antenna

Gong Chen and Yuyang Chen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

Pos3.55 Low-Cost, Printed Monopole Antenna for Wi-Fi 8 and 6G Laptop Computers

Yu-Ting Su and Saou-Wen Su (National Kaohsiung University of Science and Technology, Taiwan)

Pos3.56 Wi-Fi 7 MIMO Antennas for Metal-Housing Laptop

Wen-Shan Chen and Wei-Ren Huang (Southern Taiwan University of Science and Technology, Taiwan)

Pos3.57 A Dual-Band Dual-Circularly Polarized Shared-Aperture Microstrip Antenna for LEO Satellite Communications

Nannan Wang (Harbin Institute of Technology, China); Zixu Tang, Chengye Wang, Pengcheng Wang and Jinghui Qiu (Harbin Institute of Technology, China)

Pos3.58 A Coupling-Fed Broadband Multi-Band Annular-Slot Antenna with Omnidirectional Radiation Pattern

Jing-Yi Zhang, Chaoyang Zhao, Junjie Zhang, Shiyan Wang and Gang Zhang (Nanjing Normal University, China)

Pos3.59 Ultrawideband Circularly Polarized Cavity-Integrated EBG-Backed Archimedean Spiral Antenna for IoT Applications

Bancha Luadang (Rajamangala University of Technology Rattanakosin, Thailand); Pisit Janpangngern (Suranaree University of Technology, Thailand); Chuwong Phongcharoenpanich (King Mongkut's Institute of Technology Ladkrabang, Thailand)

Pos3.60 All Metal Inductively Connected Tightly Coupled Array (iTCA)

Alpha Osman Bah (University of Technology Sydney, Australia & UTS, Australia)

Pos3.61 A Compact Size Antenna for Wi-Fi 7 Laptop Applications

Chow-Yen-Desmond Sim (National Sun Yat-sen University, Taiwan); Ching-Ting Huang (National Taiwan University of Science and Technology, Taiwan); Sz-Jan Liao (National Sun Yat-Sen University, Taiwan)

Pos3.62 Novel Partially-Reflective-Surface Design Based on Asymmetric Compact Microstrip Resonant Cells for Wideband Gain Enhancement

Jhirat Mearnchu (Silpakorn University, Thailand); Danai Torrungrueng and Kittisak Phaebua (King Mongkut's University of Technology North Bangkok, Thailand)

Pos3.63 Improved Reflection Characteristics for Oblique Incidence of Microwave Absorber Acting as an Antenna

Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Takuji Arima (Tokyo University of Agriculture and Technology, Japan)

Pos3.64 Enhancing Realized Gain of LTCC Based Antenna by Combining Radiating Modes

Maciej Smierzchalski (ATOS, France); Christophe Delaveaud (CEA-LETI, France); Ryo Yokoyama, Shunsuke Abe and Seiji Hidaka (Murata, Japan); Antonio Clemente (CEA-Leti, France)

Pos3.65 Non-Contact Detection of Permittivity Variations and a Crack in Plastic Gears for IoT

Juntaro Hatta, Hitoshi Shimasaki and Daisuke Iba (Kyoto Institute of Technology, Japan)

Pos3.66 Analysis of Frequency Characteristics of Human Body Shadowing Loss

Ayumu Okuhigashi, Yoshiki Nakanishi, Hisato Iwai and Shinsuke Ibi (Doshisha University, Japan)

Pos3.67 Wideband Reconfigurable Dual Circularly- Polarized Magnetolectric Dipole Antenna for Mmwave Satellite Applications

Arpan Desai (Pandit Deendayal Energy University, India); Heng-Tung Hsu and Yi-Fan Tsao (National Yang Ming Chiao Tung University, Taiwan)

Pos3.68 A Measurement of Propagation Variations near the Ground Surface for Wildlife Detection Using 920 MHz Band Radio Waves

Ryo Matsuda, Makoto Kobayashi, Shunpei Yamaguchi, Koichi Shin and Masahiro Nishi (Hiroshima City University, Japan)

Pos3.69 A Dual-Polarized Patch Antenna on LTCC for 6G Upper-Mid Band Antenna-in-Package (AiP) Module

Eunyoung Park, Sangkil Kim, Gyoungdeuk Kim, Hoyong Kim and Yuna Jeong (Pusan National University, Korea (South))

Pos3.70 Millimeter-Wave Wireless Power Transfer Technology for IoT Applications

Jung Ick Moon, Jung-Nam Lee and Sun-Gyu Lee (Electronics and Telecommunications Research Institute, Korea (South)); Sunghyun Hwang (Electronics and Telecommunications Research Institute(ETRI), Korea (South)); Kyu-Min Kang and Jae Cheol Park (ETRI, Korea (South)); Dong-Uk Sim (Electronics and Telecommunications Research Institute, Korea (South)); Won Il C, Chang (Genmixtech, Korea (South)); Kwang-Kyun Kwon (NuriFlex, Korea (South)); Changhee Hyoung (Electronics and Telecommunications Research Institute, Korea (South))

Pos3.71 An Antenna Sensor for Radio-Wave-Type Endoscope

Satoru Shiraishi, Takafumi Fujimoto, Chai-Eu Guan and Toshiyuki Tanaka (Nagasaki University, Japan); Yoko Maemura (University of Nagasaki, Japan)

Pos3.72 A Novel DGS-Based Efficient UWB Circular Patch Array Antenna for ISM, WLAN, 5G and IoT

Tithi Rani (Rajshahi University of Engineering and Technology, Bangladesh); Liton Chandra Paul and Naymaa Rashid (Pabna University of Science and Technology, Bangladesh); Sk A. Shezan (Northern Border University, Saudi Arabia); Md. Ashraful Haque (UTP, Bangladesh); Ali H Alenezi (Northern Border University, Saudi Arabia)

Pos3.73 Sustainable Material Selection for 3D-Printed Overlays Applied to ESPAR Antennas

Bartosz Kamecki, Luiza Leszkowska, Benedykt Sikorski, Krzysztof Nyka and Lukasz Kulas (Gdansk University of Technology, Poland)

Pos3.74 Gain Improvement for 2x2 Patch Array Antenna by Using Metamaterial Based

Peerasan Khamsalee and Auychai Yatongchai (Suranaree University of Technology, Thailand)

Pos3.75 Measurement of Propeller Modulation for ILS Flight Inspection by Drone

Atsushi Kezuka and Shinji Saitoh (Electronic Navigation Research Institute, MPAT, Japan)

Pos3.76 Enhancing Electrode Efficiency of 350 kHz Earth-Grounded Antenna for Through-the-Earth Communication

Peerasan Khamsalee, Atawit Jantaupalee, Chokpiwat Pruekchatsiri and Auychai Yatongchai (Suranaree University of Technology, Thailand)

Pos3.77 A Low-Cost Solution for Efficient Wireless Communication in Cultivated Areas

Patryk Kalkowski (Gdansk University of Technology, Poland); Lukasz Szczygielski (Gdańsk University of Technology, Poland); Krzysztof Nyka and Lukasz Kulas (Gdansk University of Technology, Poland)

Pos3.78 Printed Antenna Arrays with Heat-Spreader for Wi-Fi 6 MIMO Application

De-Lun Huang (PEGATRON Corporation, Taiwan)

Pos3.79 Design of Differential-Antenna (DA)-Based Sensors for Characterization of Dielectric Materials

Kittima Lertsakwimarn, Danai Torrungrueng, Kitiphon Sukpreecha and Kittisak Phaebua (King Mongkut's University of Technology North Bangkok, Thailand); Hsi-Tseng Chou (National Taiwan University, Taiwan)

Pos3.80 Dual Circular-Polarized Wide-Angle Scanning Phased Array Based on Tri-Polarized Antenna

Thursday, October 30 15:40 - 17:20

4A4: [OS34] Yagi-Uda Antenna 100th Anniversary of Birth Special Session

Room A

Chairs: Koichi Tsunekawa (Chubu University, Japan), Ryo Yamaguchi (SOFTBANK Corp., Japan)

15:40 *Invention of Yagi-Uda Antenna and Its Application to Long-Distance UHF Communications*

Kunio Sawaya (Tohoku University, Japan)
(Invited Paper)

16:20 *Design and Development of Medium-Gain Cross Multi-Beam Antenna Suitable for Future Mobile Communication Systems*

Koichi Tsune (Chubu University, Japan)

16:40 *A Novel Rectenna Array Inspired by the Yagi-Uda Loop Antenna for Extended Wireless Power Transmission Distance*

Tamami Maruyama (Hiroshima Institute of Technology, Japan); Noa Ebita (Japan); Masashi Nakatsugawa (National Institute of Technology, Hakodate College, Japan); Masaya Tamura (Toyohashi University of Technology, Japan); Noriharu Suematsu (Tohoku University, Japan)

17:00 *Cubic Yagi-Uda Array Antenna for 500 MHz Band Rectenna*

Keisuke Konno and Qiang Chen (Tohoku University, Japan)

4B4: Wireless Power Transfer Technologies

Room B

Chairs: Shinji Abe (Power Wave Co. Ltd, Japan), Yoshiaki Narusue (The University of Tokyo, Japan)

15:40 *Ultra-Low Input Power Drivable IoT Wireless Sensor Using Energy Harvesting from Wi-Fi*

Masato Wadahama and Kazuhiro Fujimori (Okayama University, Japan)

16:00 *Receiver Design Considerations for Non-Coil Wireless Power Transfer Systems*

Jungho Kim and Sungmin Shin (Ulsan National Institute of Science and Technology, Korea (South)); Seongbin Kwon (UNIST, Korea (South)); Franklin Bien (Ulsan National Institute of Science and Technology, Korea (South))

16:20 *A Beam-Forming Array Antenna Based Wireless Powering Framework*

Yu-Feng Chen and Wen-Jiao Liao (National Taiwan University of Science and Technology, Taiwan)

16:40 *A Circular Patch High-Density Array Antenna for High Output-Power Rectenna Arrays*

Koki Maeda (University of Saga, Japan); Eisuke Nishiyama and Ichihiko Toyoda (Saga University, Japan)

17:00 *Application of BCITL-Based Wireless-Power-Transmission (WPT) Model for Material Level Sensors Using UHF-RFID Systems*

Supakit Kawdungta (Rajamangala University of Technology Lanna Chiang Mai, Thailand); Danai Torrungrueng (King Mongkut's University of Technology North Bangkok, Thailand); Varatchariya Thatinchan (Rajamangala University of Technology Lanna, Thailand); Kittisak Phaebua (King Mongkut's University of Technology North Bangkok, Thailand); Hsi-Tseng Chou (National Taiwan University, Taiwan)

4C4: Developments in Periodic Structures and Metasurfaces

Room C

Chairs: Pornanong Pongpaibool (National Electronics and Computer Technology Center, Thailand), Nobuyasu Takemura (Chukyo University, Japan)

15:40 Numerical Accuracy Evaluation for Scattering Waves by Multiple Plane Gratings

Hideaki Wakabayashi (Okayama Prefectural University, Japan); Masamitsu Asai (Kinki University, Japan); Jiro Yamakita (Okayama Prefectural University, Japan)

16:00 Miniaturized Metasurface Using Split Ring Resonator with Double Interdigital Structure

Sukreechat Yenmee (KMUTNB, Thailand); Pongsathorn Chomtong (King Mongkut's University of Technology North Bangkok, Thailand); Akkarat Boonpoonga (KMUTNB, Thailand); Prayoot Akkaraekthalin (King Mongkut's University of Technology North Bangkok, Thailand)

16:20 A Wide Passband Frequency Selective Absorber Based on Cascading Different Parallel Resonators

Dengshuang Yi, Qirui Yu, JiaHui Fu and Jiakai Zhang (Harbin Institute of Technology, China); Yizhi Zhang (Harbin Institute of Technology, China); Wentao Liang and Yiding Liu (Harbin Institute of Technology, China)

16:40 A High Isolation AFSS Design Method Based on Non-Resonant Band

Zhexun Zhang, Jiangcheng Ge, Tao Hong and Wen Jiang (Xidian University, China)

17:00 A Base Station Antenna for 2 GHz and 3.4 GHz with Dual Polarization Using a Frequency-Selective Reflector

Nobukazu Tanaka and Keizo Cho (Chiba Institute of Technology, Japan)

4D4: ML and AI for AP Applications

Room D

Chairs: Kazuhiro Fujita (Saitama Institute of Technology, Japan), Koichi Ichige (Yokohama National University, Japan)

15:40 Large Language Model-Inspired Transformer Framework for Antenna Design

Chang Ge and Qiang Chen (Tohoku University, Japan)

16:00 Neural Network-Based Optimization of U-Slot Microstrip Antenna for Enhanced Performance

Jitu Prakash Dhar, Eisuke Nishiyama and Ichihiko Toyoda (Saga University, Japan)

16:20 Water-Level Estimation Using Wi-Fi Channel State Information and Neural Networks

Mineki Nakayasu and Hitoshi Shimasaki (Kyoto Institute of Technology, Japan)

16:40 Enhancing Urban Wireless Path Loss Prediction with Physics-Based Deep Learning and OpenStreetMap Features

Inocent Mramba Calist and Minseok Kim (Niigata University, Japan)

17:00 *Sophistication of Machine Learning Model for Temperature Prediction During Microwave Renal Denervation*

Fitriyanti Nur Aisyah, Tohgo Hosoda, Tsugumi Nishidate and Kazuyuki Saito (Chiba University, Japan)

4E4: [OS31] Evolution of Radio Technology Shaping 6G in Japan

Room E

Chairs: Issei Kanno (KDDI Research, Inc., Japan), Satoshi Suyama (NTT DOCOMO, INC, Japan)

15:40 *Digest of Beyond 5G White Paper on Repeater, Metasurface and RIS/IRS*

Gia Khanh Tran and Kei Sakaguchi (Institute of Science Tokyo, Japan)

16:00 *Propagation Characteristics in Suburban Environment at 8GHz FR3 Spectrum for 6G*

Takahiro Hayashi and Satoshi Ito (KDDI Research, Inc., Japan)

16:20 *Evaluation and Experimental Comparison of WLAN-Based Device-Free Localization Using Distributed Antennas*

Osamu Muta, Fuma Kunihiro and Shunsuke Shimizu (Kyushu University, Japan); Tomoki Murakami, Shinya Otsuki and Hanae Otani (NTT Corporation, Japan)

16:40 *A Comparison of Eigenvalues and Channel Capacity Between OAM Mode Multiplexing and LoS MIMO with Linear or Rectangular Array in Free Space*

Makoto Taromaru (Fukuoka University, Japan)

17:00 *Terminal-Collaborated MIMO Systems: Initial Results of 25.9GHz Collaboration*

Hidekazu Murata (Yamaguchi University, Japan)

4F4: [OS21] Analysis and Measurement for Reconfigurable Intelligent Surfaces (RIS)

Room F

Chairs: Yuko Rikuta (Nihon Dengyo Kosaku Co. Ltd., Japan), Mayumi Yoshino (Kyushu Institute of Technology, Japan)

15:40 *Study on Design of Two-Layered Transparent Type Meta-Surface*

Masato Utsunomiya and Mitoshi Fujimoto (University of Fukui, Japan)

16:00 *A Study of RIS Propagation Simulation Methods with near-Field Effect*

Masayuki Shirakawa, Daisuke Hosokawa, Kohei Suzuki, Yosuke Saiki, Gilbert S Ching and Kenshi Horiata (Kozo Keikaku Engineering Inc., Japan)

16:20 *Design Optimization of Metasurface Reflectors with Discrete-State Elements via Annealing Techniques*

Yuto Kato (National Institute of Advanced Industrial Science and Technology, Japan); Michitaka Ameya (AIST, Japan); Atsushi Sanada (The University of Osaka, Japan)

16:40 *Indoor Experiment of Liquid Crystal Reconfigurable Intelligent Surface for mmWave Communications*

Hiroki Aoki, Takuya Ohto and Takahiro Hayashi (KDDI Research, Inc., Japan); Mitsutaka Okita, Kazuki Matsunaga, Masayuki Ikari, Daijiro Takano and Shinichiro Oka (Japan Display Inc., Japan)

17:00 *Design of Transmission-Type Metasurfaces and Evaluation of the Received Power Enhancement for a 5G Base Station*

Masamichi Yonehara, Nobuki Hiramatsu, Hiromichi Yoshikawa and Takafumi Uehama (Kyocera Corporation, Japan); Hisamatsu Nakano (Hosei University, Japan)

Friday, October 31

Friday, October 31 9:00 - 10:40

5A1: Smart and Reconfigurable Antennas

Room A

Chairs: Nozomi Haga (Toyohashi University of Technology, Japan), Maodudul Hasan (Toyohashi University of Technology, Japan)

9:00 *Multifunctional Reconfigurable Antenna Arrays with Distributed Diode Control*

Van Thang Nguyen and Jae-Young Chung (Seoul National University of Science and Technology, Korea (South))
(Invited Paper)

9:40 *A Polarization-Mixing Analog Beamforming (PMBF) System for 2D Beamwidth Control*

Fanchao Zeng (University of Technology Sydney, Australia); Can Ding (University of Technology Sydney (UTS), Australia); Y. Jay Guo (University of Technology Sydney, Australia)

10:00 *Design of Radomes with Flat-Top Beam for Satellite Communication Using Phase Shifting Surface*

Sung-Nien Hsieh (National Taiwan University of Science and Technology, Taiwan); Jyun-Ruei Su (Chunghwa Telecom, Taiwan)

10:20 *Realization of Constant Amplitude Standing Wave Excitation Through Multi-Level Coupling Control in a Reconfigurable Series-Fed Antenna*

Seungwoo Bang and Jaehoon Kim (Seoul National University, Korea (South)); Jun Gi Jung (Samsung Electronics, 34 Seongchon-gil, Seoul Korea, Korea (South)); Jun Hwa Oh (Samsung Research & Samsung Electronics Co., Korea (South)); Byeongjin Kim and Jungsuek Oh (Seoul National University, Korea (South))

5B1: [OS06] Propagation and Modeling in ITU-R SG3

Room B

Chairs: Myung-Don Kim (ETRI, Korea (South)), Juyul Lee (ETRI, Korea (South))

9:00 *Antenna Height Impact Analysis on Measured Path Loss and Delay Spread at Sub-6 GHz and mmWave Bands in an Urban Environment*

Azril Haniz and Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan)

9:20 *Exploring Radio Propagation Characteristics of Data Center Environments at 415 GHz*

Jinhyung Oh (Electronics and Telecommunications Research Institute, Korea (South)); Jong Ho Kim (ETRI, Korea (South))

9:40 Sub-THz Propagation Channel Characteristics in an Outdoor Open Square Environment

Masato Yomoda (University of Niigata, Japan); Minghe Mao and Minseok Kim (Niigata University, Japan)

10:00 255 GHz Indoor Office Propagation Measurements for Path Loss and Delay Spread Analysis

Juyul Lee, Myung-Don Kim, Jae-Joon Park, Byung Su Kang and Heon Kook Kwon (ETRI, Korea (South))

10:20 Sub-Terahertz Path Loss Measurements in Urban and Suburban Environments

Myung-Don Kim, Jae-Joon Park, Juyul Lee, Byung Su Kang and Heon Kook Kwon (ETRI, Korea (South))

5C1: [OS24] Electromagnetic field theory

Room C

Chairs: Hideki Kawaguchi (Muroran Institute of Technology, Japan), Chenxu Wang (National Institute for Fusion Science, Japan)

9:00 Scattering Analysis of Nano-Scale Chiral Structures in Ultraviolet Optical Vortex Using FDTD Method

Chenxu Wang (National Institute for Fusion Science, Japan); Hideki Kawaguchi (Muroran Institute of Technology, Japan); Hiroaki Nakamura (National Institute for Fusion Science & Nagoya University, Japan)

9:20 An Investigation on the Frequency-Dependent FDTD Model of Dirac Semimetals

Takumi Tamaki, Takuto Makimoto and Jun Shibayama (Hosei University, Japan); Jerdvisanop Chakaroathai (National Institute of Information and Communications Technology, Japan); Yukihiisa Suzuki (Tokyo Metropolitan University, Japan)

9:40 Temperature Sensitivity Analysis of Waveguide-Type and Kretschmann-Type SPR Sensors in the Terahertz Band Using the FDTD Method

Hinata Yagi (Tokyo Metropolitan University, Japan); Yukihiisa Suzuki (Tokyo Metropolitan University, Japan); Jun Shibayama (Hosei University, Japan); Jerdvisanop Chakaroathai (National Institute of Information and Communications Technology, Japan)

10:00 Reconstruction of Phase Information for THz Electromagnetic Beams Using Phase Retrieval Algorithms

Shunichi Fujimori (Tokyo Metropolitan University, Japan); Masafumi Fukunari (University of Fukui, Japan); Alfred Kik, Toshio Kamijo and Yukihiisa Suzuki (Tokyo Metropolitan University, Japan); Yoshinori Tatematsu (University of Fukui, Japan)

10:20 Analysis of Leakage Magnetic Fields Including Harmonic Components in Wireless Power Transfer with a Sandwich Structure

Hiroaki Arai (Tokyo Metropolitan Industrial Technology Research Institute, Japan & Tama Techno Plaza, Japan); Misato Akiyama, Hiroyasu Sano and Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Yukihiisa Suzuki and Masao Taki (Tokyo Metropolitan University, Japan)

5D1: [OS18] Indoor and Outdoor Propagation

Room D

Chairs: Naoki Kita (Tokyo Denki University, Japan), Koshiro Kitao (NTT DOCOMO, INC, Japan)

9:00 Experimental Verification of Doppler Spectrum Considering Moving Scatterers in V2V Communications

Tatsuya Kutsukawa (University of Japan & Chiba Institute of Technology, Japan); Hiroaki Nakabayashi (Chiba Institute of Technology, Japan)

9:20 Channel Measurements and Characteristics for Sub-Terahertz Band in Urban Environment

Minoru Inomata and Ryotaro Taniguchi (NTT, Japan); Wataru Yamada (NTT Corporation, Japan); Nobuaki Kuno, Koshiro Kitao, Takahiro Tomie and Satoshi Suyama (NTT DOCOMO, INC, Japan); Tetsuaki Ikoma (Keysight Technologies, Japan); Michael Millhaem and Roger Nichols (Keysight Technologies, USA)

9:40 Outdoor Spatial Scattering Measurements from Complex Structures at 92-110 GHz

Demos Serghiou, Tim Brown, Ali Ali and Pei Xiao (University of Surrey, United Kingdom (Great Britain)); Mohsen Khalily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Rahim Tafazolli (University of Surrey, United Kingdom (Great Britain))

10:00 Measurement and Analysis of Transmission Loss in the Millimeter-Wave Band for Window Glasses

Masaya Takahashi and Shoma Tanaka (SoftBank Corp., Japan); Sho Kimura, Ho-Yu Lin, Akihiro Sato and Hideki Omote (Softbank Corp., Japan)

10:20 Wideband Delay and Angular Profile Evaluation at 158 GHz in Indoor Office Environment

Nobuaki Kuno, Koshiro Kitao, Takahiro Tomie and Satoshi Suyama (NTT DOCOMO, INC, Japan); Minoru Inomata (NTT, Japan); Wataru Yamada (NTT Corporation, Japan); Ryotaro Taniguchi (NTT, Japan); Michael Millhaem (Keysight Technologies, USA); Tetsuaki Ikoma (Keysight Technologies, Japan); Roger Nichols (Keysight Technologies, USA)

5E1: Small antenna and antenna measurement

Room E

Chairs: Takafumi Fujimoto (Nagasaki University, Japan), Toru Fukasawa (Kanazawa Institute of Technology, Japan)

9:00 Conformal Design for 3D-Printable Leaky-Wave Antennas

Patrick J Bartley (The University of Queensland, Australia); Christophe Fumeaux (University of Queensland, Australia); Nic Lawrence (University of Adelaide & Defence Science Technology Group, Australia); Nghia Nguyen (Nextwaves Industries, Vietnam)

9:20 A Circularly Polarized Antenna with Optimized Symmetrical Axial Ratio Beamwidth

Phanuphong Boontamchaay (CATC Thailand, Thailand); Pongphol Aeimopas and Manurak Rattanasuttikan (Civil Aviation Training Center of Thailand, Thailand); Sathian Yutthanaboon and Usa Torteanchai (CATC, Thailand)

9:40 A W-Band Compact Wideband Vertically-Polarized Omnidirectional Antenna

Dongqing Liu (Harbin Institute of Technology, China); Nannan Wang (Harbin Institute of Technology, China); Pengcheng Wang, Guowei Xu and Jingrui Xu (Harbin Institute of Technology, China)

10:00 Realization and Validation of an L-Band Local Plane-Wave Illumination Bench for Electromagnetic Susceptibility Studies

Sami Barouki (CEA-Gramat, France & Xlim Research Institute, France); Patrick Hoffmann (CEA, France); Alain Reineix (University of Limoges, CNRS, unknown)

10:20 3D-Printed Sub-Terahertz Beam-Scanning Device

Hongmei Li, Yiding Liu, Wang Yuzhong and Yu Axiang (Harbin Institute of Technology, China); Yizhi Zhang (Harbin Institute of Technology, China); Mingshuang Hu, Zeming Kong and Jiaran Qi (Harbin Institute of Technology, China)

5F1: [OS28] Advanced Techniques for EMC/EMI

Room F

Chairs: Fauziahanim Che Seman (Universiti Tun Hussein Onn Malaysia, Malaysia), Rasyidah Hanan Mohd Baharin (National Institute of Information and

9:00 ITO-PDMS Based Millimeter Wave Transparent Reflectarray Antenna for 5G Communications

Muhammad Inam Abbasi and Altaf Ahmed (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); S. Kesarajah and Imran Mohd Ibrahim (Universiti Teknikal Malaysia Melaka, Malaysia)

9:20 Statistical Evaluation of Electromagnetic Interference Characteristics in the Aircraft Radio Altimeter Frequency Band Using Large-Scale FDTD Analysis

Kohsuke Ushimaru, Takashi Hikage, Manabu Yamamoto and Manabu Omiya (Hokkaido University, Japan); Kazuyuki Morioka and Shunichi Futatsumori (Electronic Navigation Research Institute, Japan)

9:40 Experimental Evaluation of near-Field Gain of Circularly Polarized Cross-Dipole Antenna in Pure Water at 6 GHz and 9 GHz

Aale Muhammad and Nozomu Ishii (Niigata University, Japan); Yuto Shimizu and Tomoaki Nagaoka (National Institute of Information and Communications Technology, Japan)

10:00 Design and Complex Permittivity Control of Dry Phantoms with Carbon Fibers and Nanotubes

Takehito Sato (E&C Engineering K.K, Japan); Tamaki Noto and Koji Nakagawa (E&C Engineering, Japan); Toshiyasu Tanaka (Microwave Factory Co., Ltd., Japan); Takashi Hikage (Hokkaido University, Japan)

10:20 EMC Analysis of 275kV Transmission Lines: Impacts on Nearby Equipment and Pacemakers

Zarismail Abd Rahman (Universiti Tun Hussein Onn, Malaysia); Syarfa Sapuan (University Tun Hussein Onn Malaysia (UTHM), Malaysia); Fauziahanim Che Seman (Universiti Tun Hussein Onn Malaysia, Malaysia); Mohd Fahrul Hassan (EMTEX, Malaysia)

Friday, October 31 11:00 - 12:40

5A2: AP Related Topics for B5G and 6G

Room A

Chairs: Tetsuro Imai (Tokyo Denki University, Japan), Ryochi Kataoka (KDDI Research, Inc., Japan)

11:00 Enhancing Societal Resilience Through ICT Innovations and Deployment

Masugi Inoue (National Institute of Information and Communications Technology, Japan)
(Invited Paper)

11:40 Construction of a Multi-Antenna Evaluation System Using 3GPP-Compliant Signals

Shumpei Tabuchi, Kazuma Tomimoto, Toshiki Hozen and Tomonori Ikeda (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan)

12:00 Dynamic Mode Group Selection Method for Beam Axis Misalignment in OAM Multiplexing

Ryosuke Hoshi (Waseda University, Japan); Yasunori Yagi (NTT Corporation, Japan); Doohwan Lee (NTT, Japan); Fumiaki Maehara (Waseda University, Japan)

12:20 Probing Electromagnetic Exposure Around LEO VSAT Terminals

Amina Fellan (Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau, Germany); Hans D. Schotten (University of Kaiserslautern, Germany)

5B2: Metasurface technology

Room B

Chairs: Tamami Maruyama (Hiroshima Institute of Technology, Japan), Makoto Sano (Yokohama National University, Japan)

11:00 A Reconfigurable Circular Polarized Reflective Metasurface with Strip and Parasitic Patches

Jeong-Hae Lee (Hongik University, Korea (South))

11:20 A Quasi 4-Bit Reconfigurable Metasurface Antenna for Continuous Beam Steering

Yong-Hyun Nam (Korea (South)); Jeong-Hae Lee (Hongik University, Korea (South))

11:40 Multiwavelength Multiplexing Airy Vortex Wave Generation via Impedance Metasurface

Jun Gu (University of Science and Technology of China, China & USTC, China); Xiang Zhang, Haoyang Chen and Chang Chen (University of Science and Technology of China, China); Weidong Chen (University of Science & Technology of China, China)

12:00 A Small Single-Layer Phase Gradient Metasurface for Gain Enhancement

Jialiang Han and Hui Li (Dalian University of Technology, China)

12:20 Via-Free SIW Resonator Antennas Based on Coplanar Meta-Surfaces for Generating OAM Vortex Waves

Xinhui Cui, Dongxing Gao, Fanning Kong, Yueying Bai, Liang Likai and Yanling Wang (Shandong University, China)

5C2: [OS02] Frontiers of Computational Electromagnetics

Room C

Chairs: Ming Jiang (University of Electronic Science and Technology of China, China), Keisuke Konno (Tohoku University, Japan)

11:00 Frequency Characteristics of Circuit Model of Undersea Loop Coupler Derived by Impedance Double Expansion Method

Nozomi Haga (Toyohashi University of Technology, Japan); Jerdvisanop Chakaroathai (National Institute of Information and Communications Technology, Japan); Keisuke Konno (Tohoku University, Japan)

11:20 Mesh-Free Modeling of Two-Dimensional Infinite Periodic Structure Using Green's Function for Method of Moments

Keisuke Konno (Tohoku University, Japan); Nozomi Haga (Toyohashi University of Technology, Japan); Jerdvisanop Chakaroathai (National Institute of Information and Communications Technology, Japan); Qiang Chen (Tohoku University, Japan)

11:40 Generating Sparse Basis Functions for the MoM for the Helmholtz Equation in 3D

Kazuki Niino (Mitsubishi Electric Corporation, Japan); Asuka Ikegami (Kyoto University, Japan)

12:00 Optimized Simulation Technique for Radome Antenna Models

Weijian Ran and Ming Jiang (University of Electronic Science and Technology of China, China)

12:20 An Efficient Technique for Solving Large Scale Honeycomb Arrays

Weijian Ran, Ming Jiang and Lin Lei (University of Electronic Science and Technology of China, China)

5D2: [OS30] Enhancing Radio Propagation Technologies Driven by Machine Learning

Room D

Chairs: Daisuke Hosokawa (Kozo Keikaku Engineering Inc., Japan), Tatsuya Nagao (KDDI Research, Inc., Japan)

11:00 CNN-Based Path Loss Prediction Using Overhead and Side Images Considering Antenna Patterns

Ryotaro Taniguchi (NTT Corporation, Japan); Minoru Inomata (NTT, Japan); Wataru Yamada and Tomoaki Ogawa (NTT Corporation, Japan)

11:20 A Method for Predicting Path Loss Using PointNet and Point Cloud Data of Buildings

Daisuke Hosokawa, Satoshi Iwasaki, Kenshi Horihata and Yukiko Kishiki (Kozo Keikaku Engineering Inc., Japan)

11:40 Virtual 3-D City Augmentation and Its Application to Learning-Based Radio Propagation Prediction

Rento Hagiwara, Kazuki Yuasa and Koichi Ichige (Yokohama National University, Japan); Tatsuya Nagao and Takahiro Hayashi (KDDI Research, Inc., Japan)

12:00 Deep Learning-Based Detection Using Different Polarization Passive Millimeter-Wave Images

Li Zhang (Harbin Institute of Technology, China & School of Electronics and Information Engineering, China); Yayun Cheng, Kunmiao Huang and Jinghui Qiu (Harbin Institute of Technology, China)

12:20 Sub-THz Beam Selection Based on Millimeter-Wave Beam Information

Toshihiro Sumitani, Hirofumi Sasaki, Ken Hiraga and Riichi Kudo (NTT Corporation, Japan)

5E2: Reflector and Reflectarray Antennas

Room E

Chairs: Naobumi Michishita (National Defense Academy, Japan), Toru Takahashi (Mitsubishi Electric Corporation, Japan)

11:00 A Circularly-Polarized Reflectarray at 90-GHz Band

Ching-Ting Huang, Ming-Che Li and Tzyh-Ghuang Ma (National Taiwan University of Science and Technology, Taiwan)

11:20 Axi-Symmetric Parabolic Reflector for Directive Beam for ISL

Alex Evrard (Université de Rennes, France); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Andrea Guarriello (Thales Alenia Space, France); Hervé Legay (Thalès Alenia Space, France); Ronan Sauleau (Université de Rennes, France)

11:40 Effect of Shaped Sub-Reflector Performance for Spherical Reflector Antenna

Yoshihide Yamada and Ayuni Afiqah Arjunaidi (Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia); Norazah Abdullah and Kamilia Kamardin (Universiti Teknologi Malaysia, Malaysia); Hiroshi Hashiguchi and Naobumi Michishita (National Defense Academy, Japan)

12:00 Broadband W-Band Single-Layered Circularly Polarized Reflectarray

KaiFu Chen, Lin-Ting Tseng and Tzyh-Ghuang Ma (National Taiwan University of Science and Technology, Taiwan)

12:20 One-Body Two-Dimensional Hollow Waveguide Switching Matrix with a 4×4 Triangular Lattice of Beams

Shengjia Wu, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan); Nelson Fonseca (Anywaves, France)

5F2: [OS28] Advanced Techniques for EMC/EMI

Room F

Chairs: Takashi Hikage (Hokkaido University, Japan), Tomoaki Nagaoka (National Institute of Information and Communications Technology, Japan)

11:00 Assessment of Whole-Body Exposure to Electromagnetic Fields from Beamforming Arrays Using Low-Rank Approximation

Yujiro Kushiyama and Tomoaki Nagaoka (National Institute of Information and Communications Technology, Japan)

11:20 Evaluating SAR Distribution of an Ingestible NMHA in Stomach Tissue Across MICS and ISM Bands

Kamilia Kamardin, Norsiha Zainudin and Norhudah Seman (Universiti Teknologi Malaysia, Malaysia); Yoshihide Yamada (Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia); Rasyidah Hanan Mohd Baharin (National Institute of Information and Communications Technology, Japan); Tarik Abd Latef (University of Malaya, Malaysia)

11:40 Evaluation of Multi-Frequency Electromagnetic Exposure Using Numerical Smartphone Models Considering Various Usage Conditions

Homei Fujita (National Institute of Information and Communications Technology, Japan & Chiba University, Japan); Tsugumi Nishidate, Kazuyuki Saito and Masaharu Takahashi (Chiba University, Japan); Tomoaki Nagaoka (National Institute of Information and Communications Technology, Japan)

12:00 Whole-Body SAR Evaluation Under Far-Field Exposure with Daily Posture Variability: Toward an Epidemiologically Relevant Assessment

Koki Kusakabe, Takashi Hikage and Toshihiko Nishimura (Hokkaido University, Japan); Tatsuya Kashiwa (Kitami Institute of Technology, Japan); Naomi Tamura, Yu Ait Bama, Atsuko Ikeda and Reiko Kishi (Hokkaido University, Japan)

12:20 Numerical Estimation of Temperature Increase Due to Ohmic Loss on Implanted Metal Plates Exposed to Microwaves

Shuhei Waki and Takashi Hikage (Hokkaido University, Japan); Tomoaki Nagaoka (National Institute of Information and Communications Technology, Japan)

Friday, October 31 14:00 - 15:40

5A3: RFID and Its Applications

Room A

Chairs: Naoki Honma (Iwate University, Japan), Takuya Okura (National Institute of Information and Communications Technology, Japan)

14:00 A Novel RFID Gate Station with Cylindrical Reflector for High-Accuracy Textile Tracking in Smart Hospitals

Titipong Lertwiriaprapa (King Mongkut's University of Technology North Bangkok, Thailand); Kiadtisak Salayong and Kittisak Phaebua (King Mongkut's University of Technology North Bangkok, Thailand.); Montree Saowadee (King Mongkut's University of Technology North Bangkok, Thailand) (Invited Paper)

14:40 Insole Antenna System for Detection of Elderly Wanderers

Hiroyasu Sato (Tohoku University, Japan); Kodai Sato (Tohoku University, Japan); Kazuhiro Suzuki (Life Laboratory Inc., Japan); Qiang Chen (Tohoku University, Japan)

15:00 Application of Zeroth-Order Resonant Antennas in RFID Systems Operating in the UHF Band

Yoshihito Nakado (Kyoto Institute of Technology, Japan); Kohei Enomoto, Yuto Mitsui and Yosuke Hiraiwa (DENSO WAVE Incorporated, Japan); Tetsuya Ueda (Kyoto Institute of Technology, Japan)

15:20 Input Resistance Step-Up of Normal-Mode Helical Antennas (NMHA) Using Dual and Triple-Folded Structures

Noorlindawaty Md Jizat (Multimedia University, Malaysia); Azwan Mahmud (Multimedia University & Telekom Malaysia, Malaysia); Norsiha Zainudin (Universiti Teknologi Malaysia, Malaysia); Muhsin Muhsin (Telkom University, Indonesia); Yoshihide Yamada (Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia)

Friday, October 31 14:00 - 16:00

5B3: Planar / Printed antenna and Arrays

Room B

Chairs: Shengjian Jammy Chen (Flinders University, Australia & The University of Adelaide, Australia), Manabu Yamamoto (Hokkaido University, Japan)

14:00 Single-Feed Two-Layer PCB Design for Sequentially Rotated Dipoles

Héctor Ortega-González (Eindhoven University of Technology, The Netherlands); Jean-Philippe Fraysse (Thales Alenia Space, France); Ulf Johannsen (Eindhoven University of Technology, The Netherlands)

14:20 A Simple Technique Enhancing Spectral Performance for Planar Dipole Antennas

Tianchang Ma and Quoc Hung Dang (The University of Adelaide, Australia); Christophe Fumeaux (University of Queensland, Australia); Nghia Nguyen (Nextwaves Industries, Vietnam); Shengjian Jammy Chen (Flinders University, Australia & The University of Adelaide, Australia)

14:40 Fundamental Study of Quasi-Millimeter Wave Wideband Beam Tilt Array Antenna Using Leaf-Shaped Bowtie Slot Antenna

Haruta Yamada, Takashi Hikage and Manabu Yamamoto (Hokkaido University, Japan)

15:00 Patch Antenna Bandwidth Enhancement with Asymmetric Mushroom Structures

Junyi Chen (The University of Adelaide, Australia); Shengjian Jammy Chen (Flinders University, Australia & The University of Adelaide, Australia); Christophe Fumeaux (University of Queensland, Australia); Nghia Nguyen (Nextwaves Industries, Vietnam)

15:20 Radio Area Evaluation of Base Station Antennas in a Stadium

Masayuki Nakano (KDDI Research, Japan); Yoshiaki Amano (KDDI Corporation, Japan)

15:40 Flexible Circularly Polarized Antenna for Wearable off-Body Defense Communication

Rishabh Kumar Baudh (PDPM IITDMJ, India); Sonal Sahu (PPPM IITDM JABALPUR, India); Dinesh Vishwakarma (PDPM-IITDM Jabalpur, India); Manoj Singh Parihar (ABV-IIITM, Gwalior, India)

Friday, October 31 14:00 - 15:40

5C3: Future Technologies for EM Waves and Circuits

Room C

Chairs: Rodica Ramer (University of New South Wales, Australia), Michio Takikawa (Nihon University, Japan)

14:00 A Novel Low-Profile UWB Electric Dipole Antenna for Ice-Penetrating Radar Applications

Yuxiao Tian, Zhaoqian Gong and Feng Zhang (Aerospace Information Research Institute Chinese Academy of Sciences, China); Zhangjun Ma (University of Chinese Academy of Sciences, China)

14:20 Broadband 1-Port Material Characterization Setup Using a Focusing Lens Antenna in the Millimeter Wave Band

Julio Sánchez Paredes (UMA, Spain & Telma, Spain); Javier Arjona Ramos (Universidad de Málaga, Spain); Enrique Márquez-Segura (Universidad de Malaga, Spain); Mario Pérez-Escribano (Universidad de Málaga, Spain)

14:40 Sub-Terahertz Ultra-Wideband Achromatic Cascaded Waveguide Polarizer

Keyi Ma, John S. Kot, Xin Wen and Rodica Ramer (University of New South Wales, Australia)

15:00 Linearized Low Noise Amplifier and Mixer of Radar Sensing with Received Antenna

Wen Cheng Lai (National Taiwan University of Science and Technology, Taiwan)

15:20 Low Power Phase-Locked Loop with Linearized VCO and Divider at 24 GHz

Wen Cheng Lai (National Taiwan University of Science and Technology, Taiwan)

5D3: [OS17] Simulation Analysis of Propagation

Room D

Chairs: Kenshi Horihata (Kozo Keikaku Engineering Inc., Japan), Takahiro Tomie (NTT DOCOMO, INC, Japan)

14:00 Accuracy Evaluation of Indoor Multipath Estimation Using Color Images Method

Takahiro Tomie, Satoshi Suyama, Koshiro Kitao and Nobuaki Kuno (NTT DOCOMO, INC, Japan)

14:20 Propagation Path Reutilization for Efficient Ray Tracing Method in Parameter Studies of Wireless Power Transmission

Kento Sugiyama, Yasuyuki Ninomiya, Yoto Emori, Kenshi Horihata, Akio Hasegawa and Hiroyuki Yokoyama (Advanced Telecommunications Research Institute International, Japan)

14:40 Respiration Monitoring Based on Two-Wave Model Considering Body Movement by Using mm-Wave MIMO FM-CW Radar

Mie Mle Ko and Toshifumi Moriyama (Nagasaki University, Japan)

15:00 Accelerating Ray Tracing Using Non-Uniform and Restricted Ray Launching Directions in Urban Areas

Maiko Iwatani, Takayuki Nakanishi, Kengo Nishimoto and Toru Takahashi (Mitsubishi Electric Corporation, Japan)

15:20 Measurement and Deep Learning-Based Power Prediction of the Scatterer for ISAC Channels

Hongyu Duan, Ke Guan, Danping He, Lei Yang and Tianwei Wu (Beijing Jiaotong University, China); Chuangxin Jiang (ZTE Corporation, China)

5E3: Millimeter wave and Terahertz antenna II

Room E

Chairs: Kengo Nishimoto (Mitsubishi Electric Corporation, Japan), Yoshiki Sugimoto (Nagoya Institute of Technology, Japan)

14:00 *Best Lens Antenna Shape for Multibeam with Negative Refractive Index*

Izni Husna Idris (Universiti Pertahanan Nasional Malaysia, Malaysia); Yoshihide Yamada (Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia); Kamilia Kamardin and Mohammed Farouk Al Ghifarry (Universiti Teknologi Malaysia, Malaysia)

14:20 *Design of a Rectangular-Waveguide Bent TE₂₀ Mode Converter for 150 GHz-Band Horizontally-Polarized Omni-Directional Antenna*

Renshi Funabiki (Institute of science Tokyo, Japan); Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan)

14:40 *An Ultra-Wideband Magnetolectric Dipole Antenna with HDI Technology*

Pei Gan (The Institute of Microelectronics of the Chinese Academy of Sciences, China); Yunyan Zhou, Gang Song, Jun Li, Meiyong Su and Xiaomeng Wu (Institute of Microelectronics of the Chinese Academy of Sciences, China); Qidong Wang (Institute of Microelectronics of Chinese Academy of Sciences, China)

15:00 *Design of a Hollow-Waveguide Slot Array Antenna for a Channel Sounder Excited by a Standing Wave in the 150 GHz Band*

Ryousuke Sakurai, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan); Minoru Inomata (NTT, Japan); Wataru Yamada (NTT Corporation, Japan)

15:20 *Dielectric Fan-Shaped Antenna for Millimeter Wave Band*

Keisuke Sato (Denki Kogyo Co. Ltd., Japan); Hisamatsu Nakano (Hosei University, Japan)

5F3: [OS07] HAPS mobile communication systems

Room F

Chairs: Gia Khanh Tran (Institute of Science Tokyo, Japan), Hiroyuki Tsuji (National Institute of Information and Communications Technology, Japan)

14:00 *Evaluating Inter-HAPS System Interference with TDD Frequency and Regenerative Payload*

Yuki Hokazono, Hirofumi Nakajo, Megumi Oozono, Atsunori Shimamura and Kenji Fukasawa (NTT DOCOMO, Japan); Yuto Muroki and Yoshihisa Kishiyama (Space Compass Corporation, Japan)

14:20 *Improvement of HAPS System Availability Using Open-Loop UPC Based on Local Meteorological Observation Data*

Yuto Muroki, Sunao Toya, Takuya Miyashita and Yoshihisa Kishiyama (Space Compass Corporation, Japan); Yuki Hokazono and Kenji Fukasawa (NTT DOCOMO, Japan); Hiromu Kitanozono (SKY Perfect JSAT Corporation, Japan)

14:40 *HAPS Cell Design Considering Array Antenna Configuration for Improving Spectral Efficiency*

Koichi Maki, Koji Tashiro, Tsutomu Ishikawa and Kenji Hoshino (SoftBank Corp., Japan)

15:00 *Experimental Evaluation of Beam Tracking for HAPS Feeder Link*

Kazuki Matsuura (SoftBank Corp., Japan); Yoshichika Ohta (Softbank Corp., Japan)

15:20 *Model-Based DRL for Dynamic Antenna Beamforming in HAPS Communication System*

Siyuan Yang, Mondher Bouazizi and Tomoaki Ohtsuki (Keio University, Japan)