**Time Event** Room E (Tokyo) Room B Room C Room D Room F Room G hall Room A Monday, October 27 WS3: Workshop 14:00-WS1: Workshop WS2: Workshop WS4: Workshop 17:00 Tuesday, October 28 09:00-2A1: Opening 09:30 Ceremony 09:30-2A2: Plenary 10:10 Talk 1 2A3: Plenary 10:10-10:50 Talk 2 11:10-2A4: Plenary 11:50 Talk 3 11:50-2A5: Plenary 12:30 Talk 4 13:30-Pos1: 15:10 Poster Session 15:30-2A7: Remote 2B7: [OS27] 2C7: Recent 2D7: [OS08] 2E7: Broadband 2F7: [OS14] 2G7: Novel Sensing and Advances in 17:10 Reconfigurable HAPS, NTN and and Small Emerging Control Technologies in Satellite Intelligent CEM and related Antennas Techniques Propagation Surfaces: Recent Relevant Propagation (by Transmitarray/Lens for EM **Developments** Techniques Dr. Hideki Antennas and RISs Waves and and Applications Omote) for Beyond 5G Circuits Systems (by prof. (by prof. Mohsen Khalily) Lizhao Song & prof. Shu-Lin Chen) Wednesday, October 29 09:00-3B1: DOA/TOF 3C1: [OS29] 3E1: [OS13] 3A1: [OS05] 3D1: [OS11] 3F1: [OS23] IEEE Recent Advances Antennas for AP-S and ISAP 10:40 Propagation Estimation, **Emergent** 6G/Next 2025 Young Channel Localization, in Radar Wireless Power Models and **Technologies** Sensing and Generation Transmission Professional Special Radar Applications and Measurement and Related Communications. Session (by prof. Methodologies Can Ding) Topics (by prof. (by Dr. Keisuke Core Kangwook Kim for 6G Technologies (by Sato) and prof. Takuji Dr. Yuki Tanaka) Communication and Sensing (by Arima) Dr. Taro Eichler) 3F2: [OS23] IEEE 11:00-3A2: Planar 3B2: RIS and 3C2: [OS20] 3D2: mmW/THz 3E2: [OS15] 12:40 Antennas and Antenna Reconfigurable Propagation Technologies in AP-S and ISAP Array antenna Systems for Intelligent implementation 2025 Young technology Wireless Surfaces, and deployment Professional Special Communications Metasurfaces of mmWave (by Session (by prof. (by prof. Dr Hideki Ueda) Can Ding) Yasutaka Murakami) 13:40-Pos2: Poster 15:20 Session 15:40-3A4: [OS04] 3B4: [OS19] 3C4: [OS22] 3D4: [OS10] 3E4: [OS16] 3F4: [OS23] IEEE AP-S and ISAP Advanced 17:20 Antenna Innovative Recent Advanced antenna systems Advancement of 2025 Young Measurement Techniques for Antenna and RF **Techniques** for the Microwave, Expanding Technologies for Professional Special Association Millimeter Wave, Millimeterrealization of Satellite Session (by prof. Can Ding) (AMTA) (by Dr. and Terahertz Wave/Terahertz integrated **Communications** wireless and Remote Satoru Wave Circuits Network technology (by Sensing (UNIST 17.20-Kurokawa) and Applications Coverage (by prof. Kentaro (by prof. prof. Minseok RRC Special 17:40 Takuichi Hirano) Murata) Kim & prof. Session)(by prof. Gangil Byun) Wonbin Hong) Thursday, October 30 4B1: [OS01] 09:00-4A1: Reflector, 4C1: [OS09] 4F1: Part1: 4D1: [OS03] 4E1: Millimeter-10:40 Reflectarray Advanced Recent Advances Underwater wave and Technical session [OS25] Highlighting Antenna and Wireless Terahertz and Lens and Applications Antennas Technology **EMC** Antennas I Research Measurement Metamaterials Using **Achievements** Technologies for Electromagnetic Beyond Gender (by and prof. Qiaowei Microwave and Metasurfaces Waves (by prof. Millimeter Wave (by prof. Ryuji Nozomu Ishii) Yuan) Systems (by prof. Kuse) Kun Li & prof. Xiaoming Chen) 4C2: [OS26] 11:00-4A2: Antenna 4B2: [OS01] 4D2: [OS03] 4E2: [OS12] 4F2: Part2: D&I session "Sharing 12:40 Advanced Electromagnetic Underwater Small and Low-Theory and Antenna and Design field analysis Wireless Profile Antennas Ideas on Gender Technology **EMC** and industry (by prof. Makoto Innovation' applications (by Sano) Measurement Using Electromagnetic Technologies for prof. Yukihisa Suzuki) Microwave and Waves (by prof. Millimeter Wave Nozomu Ishii) Systems (by prof. Kun Li & prof. Xiaoming Chen) 13:40-Pos3: 15:20 Poster Session 3 15:40-4A4: [OS34] 4B4: Wireless 4C4: 4D4: ML and Al 4E4: [OS31] 4F4: [OS21] for AP Developments in 17:20 Power Transfer Analysis and Yagi-Uda Evolution of Antenna 100th **Technologies** Periodic **Applications** Radio Measurement for Structures and Anniversary of Technology Reconfigurable Birth Special Metasurfaces Shaping 6G in Intelligent Surfaces Japan (by Dr. (RIS) (by Dr. Session (by Dr. Issei Kanno) Mayumi Yoshino) Yamaguchi) Friday, October 31 09:00-5A1: Smart and 5B1: [OS06] 5C1: [OS24] 5D1: [OS18] 5E1: Small 5F1: [OS28] 10:40 Reconfigurable Propagation and Electromagnetic Indoor and antenna and Advanced **Antennas** Modeling in ITUfield theory (by Outdoor antenna Techniques for R SG3 (by Dr. EMC/EMI (by prof. prof. Hideki Propagation (by measurement Myung-Don Kawaguchi) prof. Naoki Kita) Fauziahanim Che Seman and prof. Kim) Takashi Hikage) 11:00-5A2: AP Related 5E2: Reflector 5B2: 5C2: [OS02] 5D2: [OS30] 5F2: [OS28] 12:40 Topics for B5G Metasurface Frontiers of Enhancing Radio and Reflectarray Advanced Techniques for and 6G Computational Propagation technology Antennas Electromagnetics Technologies EMC/EMI (by prof. (by prof. Keisuke Fauziahanim Che Driven by Konno & prof. Machine Seman and prof. Ming Jiang) Takashi Hikage) Learning (by Dr. Tatsuya Nagao) 5E3: Millimeter 14:00-5A3: RFID and 5B3: Planar / 5C3: Future 5D3: [OS17] 5F3: [OS07] HAPS 15:40 Its Applications Printed antenna Technologies for Simulation wave and mobile and Arrays EM Waves and Analysis of Terahertz communication Circuits Propagation (by antenna II systems (by prof. Dr. Kenshi Yoshichika Ohta) Horihata) Monday, October 27 14:00 - 17:00 Room C WS2: Workshop Room D Room E Room F Tuesday, October 28 9:00 - 9:30 Room A Tuesday, October 28 9:30 - 10:10 Speaker: Motoyuki Sato, Tohoku University Title: Ground Penetrating Radar for Humanitarian Demining in Ukraine Room A Tuesday, October 28 10:10 - 10:50 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 Speaker: Seong-Ook Park, KAIST Title: A review of Antenna System Technologies for Small Satellite Tuesday, October 28 11:50 - 12:30 Speaker: Oscar Quevedo-Teruel, KTH Royal Institute of Technology Title: Physical Optics for Modelling Antennas: Merging Accuracy with Simplicit Tuesday, October 28 13:30 - 15:10 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 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 and Jiro Hirokawa (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, 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 A Compact Broadband Polarization-Reconfigurable Circularly Polarized MIMO Antenna Mingxing Ren (Guilin University of Electronic Technology, China) Pos1.16 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) Pos1.17 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 (Macau Wujing Technology Co Ltd, Macao); Hou-Pan Sio (Macao Science Center, Macao) Pos1.18 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)) Pos1.19 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 (Electonics and Telecommunications Research Institute, Korea (South)); Bonghyuk Park (ETRI, Korea (South)) Pos1.20 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)) Pos1.21 A 3D-Printed Planar Luneburg Lens with Beam Enhancement via Axially Added Refractive Index Tapering Nannan Wang (Harbin Institude of Technology, China); Yizhi Zhang (Harbin Institute of Technolog, China); Pengcheng Wang and Jingjing Liu (Harbin Institute of Technology, China) Pos1.22 Gain Enhancement of a Waveguide-Fed Wideband Sidewall-Shorted Microstrip Antenna for D-Band Applications Ta-Yeh Lin and Shuw-Guann Lin (Taiwan Semiconductor Research Institute, Taiwan); Yin-Cheng Chang (Taiwan Semiconductor Research Institute, NARLabs, Taiwan); Chaoping Hsieh (Taiwan Semiconductor Research Institute, National Applied Research Laboratories, Taiwan); Da-Chiang Chang (National Chip Implementation Center, Taiwan) Pos1.23 Dual Circular-Polarized Wide-Angle Scanning Phased Array Based on Tri-Polarized Antenna Xujing Yu, Yao Yang, Shigang Zhou and Jian-ying Li (Northwestern Polytechnical University, China) Pos1.24 Basic Study on a Novel Mechanical Beam Steering Low-Profile System with a Transmitarray Antenna Gen Nakayama (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan) Pos1.25 A Low-Profile Wideband Magnetoelectric Dipole Antenna Using Microstrip Feed Haonan Zhang, Qingxin Guo, Huachen Zhao and Zengrui Li (Communication University of China, China) Pos1.26 A Compact Omnidirectional Antenna Array for Integrated Sensing and Communication (ISAC) Hexiang Kong, Xi Chen and Xu Lin (Xidian University, China) Pos1.27 Wideband Polarization Converter Implemented with Miniaturized Metasurface Cho Hilary Scott Nkimbeng, Heesu Wang and Ikmo Park (Ajou University, Korea (South)) Pos1.28 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) Pos1.29 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) Pos1.30 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) Pos1.31 High-Performance Antenna for Ear-Mounted Devices Ryoya Kishi and Toru Fukasawa (Kanazawa Institute of Technology, Japan) Pos1.32 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) Pos1.33 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) Pos1.34 Robust Channel Reconstruction for Electronic Phantoms Under Radar Misalignment Haruki Shibasaki, Yuto Ozawa, Kentaro Murata and Naoki Honma (Iwate University, Japan) Pos1.35 Over-the-Air Testing with Reconfigurable Electronic Phantom for Wideband Radars Motoki Narusawa, Kentaro Murata and Naoki Honma (Iwate University, Japan) Pos1.36 An Azimuthal FrFT Beamforming for Automotive Radar Applications in a Single Snapshot Yonghwi Kwon, Kanghyeok Seo and Chul Ki Kim (Soongsil University, Korea (South)) Pos1.37 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) Pos1.38 Performance Analysis of an I-Shaped Slots Array Antenna for mmWave 5G Communications Moynul Hasan Akash and Masato Saito (University of the Ryukyus, Japan) Pos1.39 Dual-Polarized Tapered Slot Antenna for Multi-Probe Measurement Systems Genki Sato, Koichi Ichige and Makoto Sano (Yokohama National University, Japan) Pos1.40 Beamforming Limitations for Distributed Antenna Arrays Under Platform Positioning Deviations Giulio Orlando (Nanoavionics & University Bundeswehr Munchen, Germany); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Thomas Delamotte (Bundeswehr University Munich, Germany); Hervé Legay (Thalès Alenia Space, France) Pos1.41 Wideband Dual-Polarized Large-Curvature Elliptic Cylindrical Conformal Phase Array Xiangbo Wang, Wei Hu, Zhan Chen and Tao Hong (Xidian University, China) Pos1.42 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) Pos1.43 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) Pos1.44 Design of a Single-Layer Dual-Polarized Dual-Band and Wideband Microstrip Antenna Fed by Two L-Probes with Separated Outer Tomoki Matsushima and Yuichi Kimura (Saitama University, Japan) Pos1.45 Design of a Single-Layer Dual-Polarized Dual-Band and Wideband Ring Microstrip Antenna Fed by Two L-Probes with an Inner Terutoshi Goto and Yuichi Kimura (Saitama University, Japan) Pos1.46 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)) Pos1.47 A Circular Polarized Waveguide Antenna for OTA Production Testing in 5G-FR2 Band Jose Moreira (Advantest Europe GmbH, Germany); Sergey Churkin (Radiogigabit, Armenia) Pos1.48 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) Pos1.49 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) Pos1.50 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) Pos1.51 Flexible Metasurface-Enabled Broadband Circularly Polarized Antenna for GPS Applications Zhirui Li and Mohammad Ameen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore) Pos1.52 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)); Sirous Bahrami and Donggeun An (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South)) Pos1.53 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)) Pos1.54 A Low-Profile Filtering Transmissive Metasurface Based on a Novel Topology Ruihua Liu and Xue Ren (Shenzhen University, China) Pos1.55 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) Pos1.56 Integrated Sensing and Communication in the Terahertz Band Enabled by Photomixing Using a High-Speed Wavelength Tunable Ryota Kaide, Shenghong Ye, Yiqing Wang and Yuya Mikami (Kyushu University, Japan); Yuta Ueda (NTT, Japan); Kazutoshi Kato (Kyushu University, Japan) Pos1.57 Lossy Compression Technique for Synthetic Aperture Radar Data Using Sparse Reconstruction Masanori Gocho (National Institute of Information and Communications Technology, Japan) Pos1.58 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) Pos1.59 A Method for Detecting Sporadic E-Layer Propagation at Single Observation Point Based on Frequency Analysis of VHF Signal Naruhiko Ueda, Makoto Kobayashi, Shunpei Yamaguchi, Koichi Shin and Masahiro Nishi (Hiroshima City University, Japan) Pos1.60 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 Manufacturing Co. Ltd., Japan) Pos1.61 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) Pos1.62 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 (Tokyo Metropolitan Industrial Technology Research Institute & 3-6-1 Azuma-Cho, Japan); Hiroyasu Sano (Tokyo Metropolitan Industrial Technology Research Institute, Japan) Pos1.63 Evaluation of GPS-Based Synchronization for Distributed Antenna Networks Koki Hirai and Minseok Kim (Niigata University, Japan) Pos1.64 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) Pos1.65 Performance Improvement of Device-Free Localization Using Bayesian Optimization Gesi Teng (Nigata University, Japan); Minseok Kim (Niigata University, Japan) Pos1.66 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) Pos1.67 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) Pos1.68 Silicon-Based V-Band Circularly Polarized Antenna Zeyuan Chen (NorthwesternPolytechnicalUniversity, 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) Pos1.69 An Ultra-Wideband Magnetoelectric Dipole Antenna with HDI Technology Pei Gan (The Institute of Microelectronics of the Chinese Academy of Sciences, China); Yunyan Zhou, Gang Song, Jun Li, Meiying Su and Xiaomeng Wu (Institute of Mircoelectronics of the Chinese Academy of Sciences, China); Qidong Wang (Institute of Mircoelectronics of Chinese Academy of Sciences, China) Pos1.70 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) Pos1.71 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) Pos1.72 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) Pos1.73 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, Pos1.74 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) Pos1.75 A 3.5-GHz CMOS Power Amplifier for Wireless Communication Applications Yu-Hsin Chang and Yi-Cheng Tong (National Formosa University, Taiwan) Pos1.76 Slotted Waveguide Ka-Band Antenna Fed by a Novel Double Ridge to Single Ridge E-Plane T-Junction Alicja Schreiber (German Aerospace Center, Germany) Pos1.77 Design of Adjacent Metal Structure for Loop-Shaped Antennas Yukio Kaneko, Takashi Kawamura and Takanori Okamura (Sony Corporation, Japan) Pos1.78 Theoretical Proof of the Equivalence of LLS-2 and LLS-3 in TOA Localization Hiroki Komiyama (Meiji, University, Japan); Takeshi Amishima (Meiji University, Japan) Pos1.79 Polyester-Bamboo Composite Boards Enhanced with Graphene Oxide as Microwave Absorber in X-Band Applications Tuan Mohamad Farhan Tuan Mohd Marzuki, Huda A Majid, Nadirul Hasraf Mat Nayan and Fahmiruddin Esa (Universiti Tun Hussein Onn Malaysia, Malaysia); Muzammil Jusoh (Universiti Malaysia Perlis, Malaysia); Osman Bin Ayop (Universiti Teknologi Malaysia, Malaysia); Mohd Syahir Anwar Hamzah (Universiti Tun Hussein Onn Malaysia, Malaysia); Hilman Harun and Abd Rahim Mat Sidek (Mindmatics Sdn Bhd, Malaysia) Pos1.80 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 Technolog, China); Wentao Liang and Kuang Zhang (Harbin Institute of Technology, China) Pos1.81 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) Pos1.82 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) Pos1.83 A Design of a DAC Capacitor Array with High Linearity and Low Power Consumption Charge Redistribution Hua Fan (University of Electronic Science and Technology of China, China) Pos1.84 A 1-Watt Rectenna Prototype for Wireless Power Charging of Lunar Robots Anil Sejal Jain (Tohoku University, Japan); Hiroyasu Sato (Tohouku University, Japan); Shreya Santra (Tohoku University, Japan); Kazuya Yoshida (Space Robotics Laboratory, Tohoku University, Japan); Qiang Chen (Tohoku University, Japan) Pos1.85 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) Tuesday, October 28 15:30 - 17:10 2A7: Remote Sensing and Satellite Propagation Room A 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 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) 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 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) [OS27] Reconfigurable Intelligent Surfaces: Recent Developments and Applications (by prof. Mohsen Khalily) Room B 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 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 (by Dr. Hideki Omote) Room D 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 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, 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, 16:50 Low-Profile Magnetoelectric 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) Room F 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, 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 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 (1Egypt-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 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 9:00 - 10:40 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 (NTT DOCOMO, INC, Japan); Koshiro Kitao (NTT DOCOMO, INC., Japan); Satoshi Suyama and Takahiro Tomie (NTT DOCOMO, INC, Japan); Taro Eichler (Rohde & Schwarz, Germany); Wilhelm Keusgen (Technische Universität Berlin, Germany) Room B 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 & Deportment 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 Tantisopharak (Khon Kaen University, Thailand); Thunyawat Limpiti (Walailak University, Thailand); C. Kittiyanpunya (KMITL, Thailand); Chulalak Talubnak (Chandrakasem Rajabhat University, Thailand) [OS29] Recent Advances in Radar Technologies and Related Topics (by prof. Kangwook Kim and prof. Takuji Arima) Room C 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 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) 9:40 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) 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) Room D 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 and 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 (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan) 10:20 Photonic-Assisted Radio Beamformer for High-Frequency Wireless Applications Ken Hiraga, Honoka Itou, Hirofumi Sasaki and Riichi Kudo (NTT Corporation, Japan)

Monday, October 27 Monday, October 27 14:00 - 17:00 Room C WS3: Workshop Room E WS4: Workshop Room F Tuesday, October 28 9:00 - 9:30 2A1: Opening Ceremony Room A Tuesday, October 28 9:30 - 10:10 Speaker: Motoyuki Sato, Tohoku University Title: Ground Penetrating Radar for Humanitarian Demining in Ukraine Tuesday, October 28 10:10 - 10:50 Speaker: Qing Huo Liu, Eastern Institute of Tech Title: Multiscale Computational Electromagnetics for Antennas and Propagation Tuesday, October 28 11:10 - 11:50 Speaker: Seong-Ook Park, KAIST Title: A review of Antenna System Technologies for Small Satellite Room A Tuesday, October 28 11:50 - 12:30 Speaker: Oscar Quevedo-Teruel, KTH Royal Institute of Technology Title: Physical Optics for Modelling Antennas: Merging Accuracy with Simplicit Room A Tuesday, October 28 13:30 - 15:10 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 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 and Jiro Hirokawa (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, 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 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 A Compact Broadband Polarization-Reconfigurable Circularly Polarized MIMO Antenna Mingxing Ren (Guilin University of Electronic Technology, China) Pos1.16 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) Pos1.17 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 (Macau Wujing Technology Co Ltd, Macao); Hou-Pan Sio (Macao Science Center, Macao) Pos1.18 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)) Pos1.19 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 (Electonics and Telecommunications Research Institute, Korea (South)); Bonghyuk Park (ETRI, Korea (South)) Pos1.20 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)) Pos1.21 A 3D-Printed Planar Luneburg Lens with Beam Enhancement via Axially Added Refractive Index Tapering Nannan Wang (Harbin Institude of Technology, China); Yizhi Zhang (Harbin Institute of Technolog, China); Pengcheng Wang and Jingjing Liu (Harbin Institute of Technology, China) Pos1.22 Gain Enhancement of a Waveguide-Fed Wideband Sidewall-Shorted Microstrip Antenna for D-Band Applications Ta-Yeh Lin and Shuw-Guann Lin (Taiwan Semiconductor Research Institute, Taiwan); Yin-Cheng Chang (Taiwan Semiconductor Research Institute, NARLabs, Taiwan); Chaoping Hsieh (Taiwan Semiconductor Research Institute, National Applied Research Laboratories, Taiwan); Da-Chiang Chang (National Chip Implementation Center, Taiwan) Pos1.23 Dual Circular-Polarized Wide-Angle Scanning Phased Array Based on Tri-Polarized Antenna Xujing Yu, Yao Yang, Shigang Zhou and Jian-ying Li (Northwestern Polytechnical University, China) Pos1.24 Basic Study on a Novel Mechanical Beam Steering Low-Profile System with a Transmitarray Antenna Gen Nakayama (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan) Pos1.25 A Low-Profile Wideband Magnetoelectric Dipole Antenna Using Microstrip Feed Haonan Zhang, Qingxin Guo, Huachen Zhao and Zengrui Li (Communication University of China, China) Pos1.26 A Compact Omnidirectional Antenna Array for Integrated Sensing and Communication (ISAC) Hexiang Kong, Xi Chen and Xu Lin (Xidian University, China) Pos1.27 Wideband Polarization Converter Implemented with Miniaturized Metasurface Cho Hilary Scott Nkimbeng, Heesu Wang and Ikmo Park (Ajou University, Korea (South)) Pos1.28 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) Pos1.29 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) Pos1.30 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) Pos1.31 High-Performance Antenna for Ear-Mounted Devices Ryoya Kishi and Toru Fukasawa (Kanazawa Institute of Technology, Japan) Pos1.32 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) Pos1.33 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) Pos1.34 Robust Channel Reconstruction for Electronic Phantoms Under Radar Misalianment Haruki Shibasaki, Yuto Ozawa, Kentaro Murata and Naoki Honma (Iwate University, Japan) Pos1.35 Over-the-Air Testing with Reconfigurable Electronic Phantom for Wideband Radars Motoki Narusawa, Kentaro Murata and Naoki Honma (Iwate University, Japan) Pos1.36 An Azimuthal FrFT Beamforming for Automotive Radar Applications in a Single Snapshot Yonghwi Kwon, Kanghyeok Seo and Chul Ki Kim (Soongsil University, Korea (South)) Pos1.37 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) Pos1.38 Performance Analysis of an I-Shaped Slots Array Antenna for mmWave 5G Communications Moynul Hasan Akash and Masato Saito (University of the Ryukyus, Japan) Pos1.39 Dual-Polarized Tapered Slot Antenna for Multi-Probe Measurement Systems Genki Sato, Koichi Ichige and Makoto Sano (Yokohama National University, Japan) Pos1.40 Beamforming Limitations for Distributed Antenna Arrays Under Platform Positioning Deviations Giulio Orlando (Nanoavionics & University Bundeswehr Munchen, Germany); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Thomas Delamotte (Bundeswehr University Munich, Germany); Hervé Legay (Thalès Alenia Space, France) Pos1.41 Wideband Dual-Polarized Large-Curvature Elliptic Cylindrical Conformal Phase Array Xiangbo Wang, Wei Hu, Zhan Chen and Tao Hong (Xidian University, China) Pos1.42 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) Pos1.43 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) Pos1.44 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) Pos1.45 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) Pos1.46 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)) Pos1.47 A Circular Polarized Waveguide Antenna for OTA Production Testing in 5G-FR2 Band Jose Moreira (Advantest Europe GmbH, Germany); Sergey Churkin (Radiogigabit, Armenia) Pos1.48 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) Pos1.49 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); Pos1.50 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) Pos1.51 Flexible Metasurface-Enabled Broadband Circularly Polarized Antenna for GPS Applications Zhirui Li and Mohammad Ameen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore) Pos1.52 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)); Sirous Bahrami and Donggeun An (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South)) Pos1.53 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)) Pos1.54 A Low-Profile Filtering Transmissive Metasurface Based on a Novel Topology Ruihua Liu and Xue Ren (Shenzhen University, China) Pos1.55 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) Pos1.56 Integrated Sensing and Communication in the Terahertz Band Enabled by Photomixing Using a High-Speed Wavelength Tunable Ryota Kaide, Shenghong Ye, Yiqing Wang and Yuya Mikami (Kyushu University, Japan); Yuta Ueda (NTT, Japan); Kazutoshi Kato (Kyushu University, Japan) Pos1.57 Lossy Compression Technique for Synthetic Aperture Radar Data Using Sparse Reconstruction Pos1.58 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) Pos1.59 A Method for Detecting Sporadic E-Layer Propagation at Single Observation Point Based on Frequency Analysis of VHF Signal Naruhiko Ueda, Makoto Kobayashi, Shunpei Yamaguchi, Koichi Shin and Masahiro Nishi (Hiroshima City University, Japan) Pos1.60 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 Manufacturing Co. Ltd., Japan) Pos1.61 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) Pos1.62 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 (Tokyo Metropolitan Industrial Technology Research Institute & 3-6-1 Azuma-Cho, Japan); Hiroyasu Sano (Tokyo Metropolitan Industrial Technology Research Institute, Japan) Pos1.63 Evaluation of GPS-Based Synchronization for Distributed Antenna Networks Koki Hirai and Minseok Kim (Niigata University, Japan) Pos1.64 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) Pos1.65 Performance Improvement of Device-Free Localization Using Bayesian Optimization Gesi Teng (Nigata University, Japan); Minseok Kim (Niigata University, Japan) Pos1.66 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) Pos1.67 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) Pos1.68 Silicon-Based V-Band Circularly Polarized Antenna Zeyuan Chen (NorthwesternPolytechnicalUniversity, 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) Pos1.69 An Ultra-Wideband Magnetoelectric Dipole Antenna with HDI Technology Pei Gan (The Institute of Microelectronics of the Chinese Academy of Sciences, China); Yunyan Zhou, Gang Song, Jun Li, Meiying Su and Xiaomeng Wu (Institute of Mircoelecronics of the Chinese Academy of Sciences, China); Qidong Wang (Institute of Microelectronics of Chinese Academy of Sciences, China) Pos1.70 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) Pos1.71 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) Pos1.72 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) Pos1.73 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, Pos1.74 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) Pos1.75 A 3.5-GHz CMOS Power Amplifier for Wireless Communication Applications Yu-Hsin Chang and Yi-Cheng Tong (National Formosa University, Taiwan) Pos1.76 Slotted Waveguide Ka-Band Antenna Fed by a Novel Double Ridge to Single Ridge E-Plane T-Junction Alicja Schreiber (German Aerospace Center, Germany) Pos1.77 Design of Adjacent Metal Structure for Loop-Shaped Antennas Yukio Kaneko, Takashi Kawamura and Takanori Okamura (Sony Corporation, Japan) Pos1.78 Theoretical Proof of the Equivalence of LLS-2 and LLS-3 in TOA Localization Hiroki Komiyama (Meiji, University, Japan); Takeshi Amishima (Meiji University, Japan) Pos1.79 Polyester-Bamboo Composite Boards Enhanced with Graphene Oxide as Microwave Absorber in X-Band Applications Tuan Mohamad Farhan Tuan Mohd Marzuki, Huda A Majid, Nadirul Hasraf Mat Nayan and Fahmiruddin Esa (Universiti Tun Hussein Onn Malaysia, Malaysia); Muzammil Jusoh (Universiti Malaysia Perlis, Malaysia); Osman Bin Ayop (Universiti Teknologi Malaysia, Malaysia); Mohd Syahir Anwar Hamzah (Universiti Tun Hussein Onn Malaysia, Malaysia); Hilman Harun and Abd Rahim Mat Sidek (Mindmatics Sdn Bhd, Malaysia) Pos1.80 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 Technolog, China); Wentao Liang and Kuang Zhang (Harbin Institute of Technology, China) Pos1.81 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 Pos1.82 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) Pos1.83 A Design of a DAC Capacitor Array with High Linearity and Low Power Consumption Charge Redistribution Hua Fan (University of Electronic Science and Technology of China, China) Pos1.84 A 1-Watt Rectenna Prototype for Wireless Power Charging of Lunar Robots Anil Sejal Jain (Tohoku University, Japan); Hiroyasu Sato (Tohouku University, Japan); Shreya Santra (Tohoku University, Japan); Kazuya Yoshida (Space Robotics Laboratory, Tohoku University, Japan); Qiang Chen (Tohoku University, Japan) Pos1.85 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) Tuesday, October 28 15:30 - 17:10 Room A 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) 16:10 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) 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 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) 2B7: [OS27] Reconfigurable Intelligent Surfaces: Recent Developments and Applications (by prof. Mohsen Khalilv) Room B 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) Room C 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) [OS08] HAPS, NTN and related Propagation (by Dr. Hideki Omote) Room D 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) Room E 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, 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, 16:50 Low-Profile Magnetoelectric 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) Room F 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 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 (1Egypt-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) Room G 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 9:00 - 10:40 and Sensing (by Dr. Taro Eichler) Room A 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 (NTT DOCOMO, INC, Japan); Koshiro Kitao (NTT DOCOMO, INC., Japan); Satoshi Suyama and Takahiro Tomie (NTT DOCOMO, INC, Japan); Taro Eichler (Rohde & Schwarz, Germany); Wilhelm Keusgen (Technische Universität Berlin, Germany) Room B 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 & Deportment 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 Tantisopharak (Khon Kaen University, Thailand); Thunyawat Limpiti (Walailak University, Thailand); C. Kittiyanpunya (KMITL, Thailand); Chulalak Talubnak (Chandrakasem Rajabhat University, Thailand) Room C 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 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) 9:40 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) 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. (by Dr. Keisuke Sato) Room D 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 and 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 (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, 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 (by Dr. Yuki Room E 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) Room F 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 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) 9:50 Design of a Folded Reflectarray Antenna with High Aperture Efficiency and Low Sidelobes Makoto Sano (Yokohama National 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 11:00 - 12:40 Room A 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 Takashi Shiraki and Takehisa Wada (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan); Yuta Mori (Sharp Corporation, Japan) 12:20 A Fast DBF Array Antenna Calibration by Multi-Frequency Multi-Beam REV Method Nakazawa Tomoki, Koki Furuuchi, Welday Gerezgiher Berhe, Tomoyuki Furuichi, Satoshi Tsukamoto and Noriharu Suematsu (Tohoku University, 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 A-Rahim (Universiti Teknologi Malaysia & Advanced RF and Microwave, Malaysia); Noor Asmawati Samsuri (Universiti Teknologi Malaysia, Malaysia); Farid Zubir (Universiti Teknologi Malaysia & Faculty of Electrical Engineering, Malaysia); Sunti Tuntrakool (KMITL, Thailand) 12:20 Secrecy Performance Optimization for STAR-RIS Assisted Communications Fang-Biau Ueng (National Chung Hsing University, Taiwan); Ye-Shun Shen (National Formosa University, Taiwan); Li-You Lin (National Chung Hsing University, Taiwan) [OS20] Reconfigurable Intelligent Surfaces, Metasurfaces (by prof. Yasutaka Murakami) Room C 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 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 & Waseda University, Japan); Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Issei Watanabe (National Institute of Infomation 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 Yamaquchi (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) Room F 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 Corporation & 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 Lavoratory 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)

Room F

11:00 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)) 11:25 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) 11:50 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) 12:15 915MHz Wireless Power Transfer System for Supercapacitor-Energized IoT Terminals Wei Lin (The Hong Kong Polytechnic University, Hong Kong) Wednesday, October 29 13:40 - 15:20 Room: Event hall Pos2.1 Direction Selective Wavefront Engineering with Asymmetric Metagratings Zhen Tan (Xi'an Jiaotong University, France); Jianjia Yi (Xi'an Jiaotong University, China); Shah Nawaz Burokur (LEME, 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 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) Pos2.4 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) Pos2.5 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) Pos2.6 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) Pos2.7 Quantum Computing Formulation for Antenna Applications Using Pseudo Binary Encoding Ryo Yamaguchi (SOFTBANK Corp., Japan); Tomonori Ikeda and Kazuma Tomimoto (Softbank Corp., Japan) Pos2.8 Geometry Scalable Model of on-Chip Multilayer Interdigital Capacitors Yiwen Liu and Huanpeng Wang (University of Electronic Science and Technology of China, China); Jia Liu (China National Accreditation Service for Conformity Assessment, China); Yunqiu Wu, Jie Liu, Huihua Liu, Yiming Yu, Chenxi Zhao, Qingfeng Zhang and Kai Kang (University of Electronic Science and Technology of China, China) Pos2.9 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)) Pos2.10 Design of 4-Beam Orthogonal Switching Matrices Using Couplers with Smaller Coupling Ratio Boyu Zhang, Shengjia Wu and Jiro Hirokawa (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan); Nelson Fonseca (Anywaves, France) Pos2.11 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) Pos2.12 Amplitude-Tailorable Spin-Decoupled Metasurface for Wideband Dual-Circularly Polarized Low-Sidelobe Transmitarray Weixu Yang, Ke Chen and Yijun Feng (Nanjing University, China) Pos2.13 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) Pos2.14 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) Pos2.15 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) Pos2.16 Performance Evaluation of Non-Linear Precoded Massive MIMO-OFDM with Peak Cancellation Kiyoaki Inada, Zhuoran Li and Osamu Muta (Kyushu University, Japan) Pos2.17 Impedance Matching Method of Metasurface-Aided Magnetic Wireless Power Transfer for Deep Implants Based on Maximal Ratio Ryoya Ishiura, Maoyuan Li and Takahiro Aoyagi (Institute of Science Tokyo, Japan) Pos2.18 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) Pos2.19 Robust First-Order Bragg Peak Extraction Method Based on Improved Dynamic Programming Zichun Wang, Yingning Dong and Xin Zhang (Harbin Institute of Technology, China) Pos2.20 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) Pos2.21 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) Pos2.22 Semi-Implicit FDTD Analysis of a Spoof Plasmonic Structure with High-Contrast Gratings Kazuhiro Fujita (Saitama Institute of Technology, Japan) Pos2.23 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) Pos2.24 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) Pos2.25 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) Pos2.26 300-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) Pos2.27 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) Pos2.28 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) Pos2.29 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) Pos2.30 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) Pos2.31 A Slot-Coupled SRR Antenna for 5G n77 Applications Wen Hsiu Hsu (University of SHU-TE, Taiwan) Pos2.32 Design of a Circularly Dual-Polarized Wideband Microstrip Antenna Fed by Two Orthogonally-Arranged L-Probes and a Two-

Section Hybrid Coupler

Zi Li (China)

Valparaiso, Chile)

and Technology of China, China)

Koen Mouthaan (NUS, Singapore)

**Equations** 

Japan)

Beamwidth

Japan)

Yo Makabe and Yuichi Kimura (Saitama University, Japan)

Seidai Suzuki and Yuichi Kimura (Saitama University, Japan)

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

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

Pos2.39 Multiband, Short-Circuited Plate Dipole for Wi-Fi 8 and 6G Applications

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

Pos2.43 3D-Printed Sub-Terahertz Beam-Scanning Device

Manoj Singh Parihar (ABV-IIITM, Gwalior, India)

Akihiko Hirata (Chiba Institute of Technology, Japan)

Pos2.33 Design of a Low-Profile Wideband Ring Microstrip Antenna Fed by Two L-Probes with a Rat-Race Coupler

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

Pos2.36 Array Pattern Optimization Method for Modular Subarray-Based Fabry-Perot Cavity Antenna Array

Pos2.38 Dynamic Pattern Generation of a Two-Element ESPAR Antenna Using Reactance Time Function

Pos2.40 A Tri-Band Shared-Aperture Antenna Based on Dipole and Taper Slots with Large Frequency Ratio

Pos2.41 Omnidirectional Circularly Polarized Dielectric Resonator Antenna for UAV Aplications

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

Pos2.45 Fully Additive Manufactured Ku-Feeder Link Antenna for Satellite Communications

Pos2.46 Flexible Circularly Polarized Antenna for Wearable off-Body Defense Communication

Pos2.49 Effect of Road Width on Non-Line-of-Sight Propagation over Intersections

Pos2.50 Oriented Ship Detection in SAR Images with Angle-Aware Gaussian IoU Loss

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

(University of Macau, Macao); Ngai Kong (Crosstech Innovation Group Limited, China)

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

Pos2.58 Design and Analysis of a 28 GHz Leaky-Wave Antenna with Coaxial Feeding

Pos2.59 Design of 140 GHz Array Antenna Using Synthetic Fused Silica Glass Substrate

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

University, China); Yunxi Tao and Liu Qingyue (Northwestern Polytechnical University, China); Zeyuan Chen

Pos2.63 Dual-Band Microstrip Antena with T- and E-Shape Defected Ground Structure for Wi-Fi 7 Technology Loveta Ramyhaidar Winaryo (University of Indonesia, Indonesia); Fitri Yuli Zulkifli (Universitas Indonesia, Indonesia)

Pos2.66 A Study on Miniaturization of Millimeter-Wave UWB Monopole Antenna Using Coupling Structure

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

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

Pos2.61 Efficient Full-Wave Analysis and Optimization of Large Horn and Waveguide Antenna Arrays

Pos2.62 A DGS-Based Dual-Band Antenna for ISM, WiMAX, and X-Band Satellite Communication

Pos2.64 A Novel Low-Profile UWB Electric Dipole Antenna for Ice-Penetrating Radar Applications

Pos2.65 A Stacked Wideband Dielectric Resonator Antenna for 5G Communication Systems

Pos2.68 Dual-Band Dual Slant-Polarized 5G Base-Station Antenna for Sub-6 GHz Spectrum

Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain))

Pos2.70 Field-of-View-Enhanced Metasurface Lens Based on Dual-Polarized Elements

Pos2.71 Calibration Factor Measurement of RF Power Sensors Using a Vector Network Analyzer

Pos2.73 Radio Propagation Prediction Using Machine Learning and Multiple Side-View Images

Pos2.76 Estimation Method for Elevation Angle of Arrival Using a Circular Monopole Array Antenna

Pos2.79 A Dual-Polarized Antenna Array with L-Strip Isolator for Ka-Band Satellite Communication

Pos2.81 Variation of Global Ionospheric Parameters on Space-Borne VLF Antenna Characteristics

Pos2.84 A Quick and Low-Cost Simulation Approach for the OAM Metasurface with 20 x 20 Unit Cells

University, Hong Kong); Yiannis Vardaxoglou (South China University of Technology, China)

Pos2.86 Receiver Design Considerations for Non-Coil Wireless Power Transfer Systems

Franklin Bien (Ulsan National Institute of Science and Technology, Korea (South))

and Masahiro Sato (SEIKOH GIKEN, Japan); Hiroshi Murata (Mie University, Japan)

Pos2.85 Passive Single-Layer Smart Electromagnetic Skin for Enhancing 5G Signal Coverage in Urban Areas

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

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

Pos2.78 Non-Dispersive Jones Matrix for Polarization Multiplexed Holographic Encryption

Pos2.77 Compact High-Directive Electronically-Beam-Switchable Yagi-Uda Antenna for Sub-6G Technology

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

Pos2.82 Accurate Measurement of Electric Fields near Scattered Objects in the GHz Band Using Electro-Optic (EO) Probes

Pos2.83 Current Ratio Conditions for Optimal Efficiency in a Multi-Tx WPT System with Different Coil Specifications

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

YongYu Huang, Wang Cheong and Kam-weng Tam (University of Macau, Macao); 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

Zhuo Huang, Guan-Long Huang and Mustafa Khalid Taher Al-Nuaimi (Foshan University, China); Wei Lin (The Hong Kong Polytechnic

Jungho Kim and Sungmin Shin (Ulsan National Institute of Science and Technology, Korea (South)); Seongbin Kwon (UNIST, Korea (South));

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

Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology, Japan); Michitaka Ameya (AIST, Japan); Masatoshi Onizawa

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

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

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

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

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

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

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)

**16:40** Interference-Free Human-Aware Beamforming for Microwave Wireless Power Transfer Mao Sekine, Shunto Arai, Kentaro Murata and Naoki Honma (Iwate University, Japan)

17:20 Decoupling of Antenna and Arrays Using Meta-Surface Polarization-Rotators

Takehiro Yamaki and Satoshi Yoshida (Ryukoku University, Japan)

Nakata and Atsushi Sanada (The University of Osaka, Japan)

17:20 SDR-Based Propagation Measurements in Indoor Corridors

prof. Minseok Kim & prof. Wonbin Hong)

Minghe Mao and Minseok Kim (Niigata University, Japan)

16:00 Wireless Coverage Enhancement via EM Scattering Redistribution

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

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

Corporation, Japan); Kenichi Okada (Tokyo Institute of Technology, Japan)

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

Ishioka, Nagahiro Abe and Koji Yamanaka (Mitsubishi Electric Corporation, Japan)

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

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

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

Minseok Kim (Niigata University, Japan); Jun-ichi Takada (Institute of Science Tokyo, Japan)

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

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

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

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

University of Science and Technology & POSTECH, Korea (South))

Abbas (University of Glasgow, United Kingdom (Great Britain))

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

16:55 Radar Fusion for Enhanced Resident Monitoring in Long-Term Care Facilities

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

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

Korea (South)); Ick-Jae Yoon (Chungnam National University, Korea (South))

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

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

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

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

**9:40** Forward Scattering Enhancement of Monopole Antenna with Huygens' Metasurface Hiroshi Hashiguchi and Naobumi Michishita (National Defense Academy, Japan)

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

University, Japan); Qiang Chen (Tohoku University, Japan)

Akio Sejimo and Nozomu Ishii (Niigata University, Japan)

Qiaowei Yuan (Tohoku Institute of Technology, Japan)

4E1: Millimeter-wave and Terahertz Antennas I

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

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

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

16:30 Study on Materials for Weight Reduction of Lens Antennas for HAPS Ground Stations

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

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

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

Wednesday, October 29 15:40 - 17:20

16:05 RePH: RIS-Inspired Electronic Phantom

Thursday, October 30 9:00 - 10:40

Room F

Room A

Room B

Room C

Room D

Room E

Technology, Japan)

(Polytechnique Montréal, Canada)

Thursday, October 30 11:00 - 12:40

Ying Liu (Xidian University, China)

Technology of China, China)

(Invited Paper)

Room B

Room C

Japan)

Room D

Room E

Room F

Nagoya University, Japan)

11:00 Design of High Gain and Low Scattering Antennas

Qiaowei Yuan)

Room F

Japan)

Corp., Japan)

Bangkok, Thailand)

Jiaotong University, China)

Tsutomu Nagayama (Kagoshima University, Japan)

(Invited Paper)

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

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

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

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

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

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

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

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

Luyu Zhao, Jiafeng Ge and Haoxuan Li (Anhui University, China); Zexing Fan (Anhui Lambda Science and Technology Corporation Limited,

Nagahiro Abe, Takuma Nishimura, Hikaru Watanabe, Ichiro Somada, Takumi Nagamine, Akimichi Hirota and Yuta Sugiyama (Mitsubishi Electric

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

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

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

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

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

Cong Minh Hieu Le, Hang Song, Nopphon Keerativoranan and Andrey S Andrenko (Institute of Science Tokyo, Japan); Minghe Mao and

**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

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

Youngno Youn (Incheon National University, Korea (South)); Daehyeon Kim (POSTECH, Korea (South)); Donggeun An (Pohang University of

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

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

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

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

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

Sahil Sharma (Indian Institute of Technology, Delhi, India); Joby Joseph (Professor IIT Delhi, India); Qammer Abbasi, Jonathan Taylor and Hasan

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

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,

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)

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

Kitiphon Sukpreecha, Titipong Lertwiriyaprapa, Danai Torrungrueng and Kittisak Phaebua (King Mongkut's University of Technology North

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

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

OS09] Recent Advances and Applications of Metamaterials and Metasurfaces (by prof. Ryuji

Jesus Maria Jimenez-Suarez (KTH Royal Institute of Technology, Sweden); Sergio Garcia-Martinez (Universidad Politécnica de Madrid, Spain);

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

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

4D1: [OS03] Underwater Wireless Technology Using Electromagnetic Waves (by prof. Nozomu Ishii)

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

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,

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

10:00 Electromagnetic Propagation in Seawater and Hybrid Air-Seawater Environments Using a Hollow Cylindrical Concrete Structure

Naoki Kuzu and Nozomu Ishii (Niigata University, Japan); Masaharu Takahashi (Chiba University, Japan); Qiaowei Yuan (Tohoku Institute of

9:00 Constitutive Method for Topological Waveguides Using Two-Dimensional T- and  $\pi$ -Type Rhombic Unit Cell Structures

Francisco Mesa (University of Seville, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)

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

Chakarothai and Katsumi Fujii (National Institute of Information and Communications Technology, Japan)

9:40 Applicable Range of Pseudo-Scale Models for Air-Sea Two-Layer Problems Using Sommerfeld Integral

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

Technology, Japan); Qiang Chen (Tohoku University, Japan); Hiroshi Yoshida (JAMSTEC & IACE, Japan)

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

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)

(Gapwaves AB, Sweden); Ashraf Uz Zaman (Chalmers University of Technology, Sweden)

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

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

University, Japan); Masaharu Takahashi (Chiba University, Japan)

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

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

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

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

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

**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)

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

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

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

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

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

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

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

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

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

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

4E2: [OS12] Small and Low-Profile Antennas (by prof. Makoto Sano)

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

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

**11:40** Simulation of Pattern Reconfigurable Antenna Composed of Patch and Monopole Elements
Naoki Takamura, Shimpei Akimoto and Kengo Nishimoto (Mitsubishi Electric Corporation, Japan)

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

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

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

Alvarez (Thales Alenia Space, Spain); Andreas Knopp (Bundeswehr University Munich, Germany)

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

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)

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

Dion Hayu Fandiantoro, Takeshi Fukusako and Ryuji Kuse (Kumamoto University, Japan); Kazuma Tomimoto, Toshiki Hozen and Tomonori

Carlos Molero and Juan Rafael Sanchez-Martinez (University of Granada, Spain); Mario Pérez-Escribano (Universidad de Málaga, Spain); Pablo

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

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

Yuika Nakayama (University of Saga, Japan); Yuto Shimada and Eisuke Nishiyama (Saga University, Japan); Ryo Yamaguchi (SOFTBANK Corp.,

Pos3.7 Design of a Microstrip Antenna Array Fed by Inclined Slots on the Broad Wall of a Rectangular Waveguide with Standing-Wave

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

**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)

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

Yukihisa Nanbu (National Institute of Technology, Ariake College, Japan)

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)

Excitation for 45-Degree Inclined Linear Polarization

Kenshi Inoue and Yuichi Kimura (Saitama University, Japan)

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

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)

Pos3.10 4-Subarray MIMO Monopole Antenna with Beam Steering Function Seiya Katsuragawa and Kazuhiro Honda (University of Toyama, Japan)

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

Pos3.15 Research on RCS Reduction Based on Electromagnetic Surface

University, Japan)

Padilla (University of Granada, Spain); Antonio Alex-Amor (University of Pennsylvania, USA)

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

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

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

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

Japan); Toshiki Hozen and Kazuma Tomimoto (Softbank Corp., Japan); Ichihiko Toyoda (Saga University, Japan)

Thursday, October 30 13:40 - 15:20

Pos3: Poster Session 3

Room: Event hall

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

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

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

Toyama, Japan); Kun Li (The University of Electro-Communications, Japan)

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

Kazuhiro Fujita (Saitama Institute of Technology, Japan)

Koshin Miwatashi and Jun Shibayama (Hosei University, Japan)

Miyuki Hirose (Kyushu Institute of Technology, Japan)

Takashi Kawamura (Sony Corporation, Japan)

Switzerland); Takahiro Aoyagi (Institute of Science Tokyo, Japan)

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

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

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

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

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

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

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

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

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

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

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

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

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

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,

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 &

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

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)

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

[OS26] Electromagnetic field analysis and industry applications (by prof. Yukihisa Suzuki)

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

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

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

Korea (South)); Jun Yeop Lee and Soon-Yong Kwon (Ulsan National Institute of Science and Technology (UNIST), Korea (South))

Si Eun Han and Jaeeun Park (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); Mincheal Kim and EunMi Choi (UNIST,

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

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

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

(Pohang University of Science and Technology (POSTECH), Korea (South)); SeUn Shin (POSTECH, Korea (South))

15:40 Modelling and Experimental Validation of Fluorescence Modulation in Mid-Infrared Photothermal Microscopy

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

Pos2.69 Dual-Polarized Ultra-Wide-Angle Scattering Metasurface

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

Pos2.74 Monitoring Pollinators with 60 GHz Micro-Doppler Radar

Professor, DTU Space, Technical University of Denmark, Denmark)

Pos2.75 A MIMO Array Antenna for Millimeter-Wave Imaging Radar

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

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

Tong He (Zhejiang Lab, China); Li Kai (Zhejiang University, China)

Hyungchul Kim (National Korea Maritime & Ocean University, Korea (South))

Pos2.80 Double Ridged Antenna with Dipole Element
Akio Kuramoto (NEC Platforms, Ltd., Japan)

and Man-Chon Si (Macao Science Center, Macao)

Wednesday, October 29 15:40 - 17:40

Lars Foged (Microwave Vision Italy, Italy)

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

Michitaka Ameya (AIST, Japan)

Kentaro Murata)

Technology, Japan)

University, Japan)

Technology, Japan)

and Technology (UNIST), Korea (South))

Room D

Room B

Room C

Yoshihiko Akamine (Japan Ministry of Defense, Japan)

Room A

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

University of Science and Technology (POSTECH), Korea (South))

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

Pos2.60 Design of a Novel Planar Filtering Quasi-Yagi Antenna

Alenezi (Northern Border University, Saudi Arabia)

(University of Chinese Academy of Sciences, China)

Nobuyasu Takemura (Chukyo University, Japan)

Technology, China)

Jia Fang (CETC38, China)

Pos2.55 Analysis of Effective Permittivity and Permeability in a Landy-Type Metamaterial Absorber

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

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

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

Pos2.42 A Low-Profile Wideband Endfire-Broadside Integrated mmWave Phased Array Antenna for B5G IoT Smartphones

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

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

Hongmei Li, Yiding Liu, Wang Yuzhong and Yu Axiang (Harbin Institute of Technology, China); Yizhi Zhang (Harbin Institute of Technolog,

Pos2.44 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 Ll (SHANGHAI Jiao Tong University, China); Ping Ll (University of Electronic Science

Rishabh Kumar Baudh (PDPM IIITDMJ, India); Sonal Sahu (PPPM IIITDM JABALPUR, India); Dinesh Vishwakarma (PDPM-IIITDM Jabalpur, India);

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

Pos2.52 Wireless Charging System for UAVs Based on High-Integration Irregular Asymmetric Coupler and Constant Current Output

Pos2.54 A Fast Time-Frequency Transformation Method for EM Response Calculation Based on High-Frequency Transmission Line

Pos2.56 Dual-Band Metasurface to Improve Transmission Through Glass in mm-Wave Array Modules for Mobile Terminals

Pos2.57 Eliminating Communication Blindspots Using a Single-RF Chain Planar 60 GHz Antenna Featuring High Gain and Wide-

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

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

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,

Zhongpeng Liu (Northwestern Polytechnical University, China); Xilong Lu (Yangtze River Delta Research Institute, Northwestern Polytechnical

(NorthwesternPolytechnicalUniversity, China); Rui Zhang (Yangtze River Delta Research Institute, Northwestern Polytechnical University, China)

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

Yuxiao Tian, Zhaoqian Gong and Feng Zhang (Aerospace Information Research Institute Chinese Academy of Sciences, China); Zhangjun Ma

Pos2.67 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); Widyasmoro Widyasmoro (Universitas Muhammadiyah Yogyakarta, Indonesia); Dirk Heberling (RWTH Aachen University,

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

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

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))

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

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

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

Yangyong Zhang and Yu Chen (722 Research Institute, CSIC, China); Zhiqiang Chai, Dudu Huang and Huiran Zeng (Xidian University, China);

Pos2.72 Three-Axis Magnetic Induction Sensor for Mid-Range Magnetic Communication in Heterogeneous Media Environments

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

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

Pos2.47 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)

Pos2.48 Effect of Breathing on Reflection and Diffraction of 300 GHz Radio Waves in the Human Body

Pos2.51 Unit Cell Design and Performance Evaluation of a Reconfigurable Intelligent Surface Utilizing Liquid Crystals

Pos2.53 An Optically Modulated UHF RFID Tag and Its Application in Range of Motion Arc of Shoulder Rehabilitation

Pos2.34 Antennas for Wireless Powering of Wearable Devices in Small Animal Medical Research

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

Pos2.35 A Compact Polarization-Reconfigurable Transmit Phased Array for L-Band Radar

Pos2.37 Decoupling and Cross-Polarization Suppression for Antenna Using Parasitic Strips

```
Zhichao Miao (Harbin Institute of Technology, China); Wei Chen (China Airborne Missile Academy, China); Min Zhang (Harbin Institute of
    Technology wei hai, 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)); Yeoung-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 Design of an Ultrawide-Angle 77 GHz Transmission Window for Radome Supporting Both TE- and TM-Polarizations
    Shuang Zeng (Wuhan University of Technology, China)
Pos3.27 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)
Pos3.28 A W-Band Planar Luneburg Lens Antenna with Multiple Sum and Difference Beams
   Jingrui Xu (Harbin Institute of Technology, China); Nannan Wang (Harbin Institude of Technology, China); Pengcheng Wang, Guowei Xu and
   Dongqing Liu (Harbin Institute of Technology, China)
Pos3.29 Multi-Port Center-Feed Slotted Waveguide Antenna Array for Power Combining
    Chuanming Zhu, Haikun Jia, Wei Deng and Baoyong Chi (Tsinghua University, China)
Pos3.30 Post-Wall Waveguide Series-Fed Sidelobe-Suppression Slot Subarray Antenna for Millimeter-Wave Radar
   Hayato Sato and Jiro Hirokawa (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan)
Pos3.31 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 Catolica de
Pos3.32 Millimeter-Wave Dual-Polarized Patch Antenna with Low Cross-Polarization for 5G Applications
    Keshuang Feng and Xin Xu (Southeast University, China)
Pos3.33 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)
Pos3.34 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)
Pos3.35 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))
Pos3.36 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)
Pos3.37 Radiation Characteristics of Wullenweber Antenna with ULPIL Element Antenna
   Mitsuo Taguchi (Nagasaki University, Japan); Haruo Kawakami (Later Sophia University, Japan)
Pos3.38 A Novel Coplanar Waveguide Feeding Method for Tapered Slot Antennas
    Mayumi Matsunaga (Shizuoka University, Japan)
Pos3.39 Multi-Activation Fluid Antenna System with a Single RF Chain for Fast Multi-User Access
   Jiewei Huang (Shenzhen Technology UniversitySHEN, China); Huan Meng and Baiyang Liu (Shenzhen Technology University, China); Kin Fai
    Tong (Hong Kong Metropolitan University, Hong Kong)
Pos3.40 Study on Implementation of Vehicle Antenna for NTN Applications
   Tomonori Ito and Keisuke Noguchi (Kanazawa Institute of Technology, Japan)
Pos3.41 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)
Pos3.42 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 Technolog,
   China); Wang Yuzhong, Mingshuang Hu, Yongjian Ma, Qirui Yu and Yu Axiang (Harbin Institute of Technology, China)
Pos3.43 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)
Pos3.44 Dual-Polarized Compact Shared-Aperture Array Antenna with Functional Reuse
   Miao Lv and Weisen Guo, Weisen (Xidian University, China); Tong Wu (Xi'dian University, China); Zhiya Zhang (Xidian University, China)
Pos3.45 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)
Pos3.46 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)
Pos3.47 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)
Pos3.48 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)
Pos3.49 Human Motion Classification Using Multilink Millimeter-Wave Channels
    Yupeng Wang and Minseok Kim (Niigata University, Japan)
Pos3.50 Triple-Band Metasurface Absorber
    Qiongyan Lei (Harbin Institute of Technology, China); Xiyao Huang (Harbin Insititute of Technology, China); Shengchang Lan, Yueyi Yuan and
    Kuang Zhang (Harbin Institute of Technology, China)
Pos3.51 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)
Pos3.52 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))
Pos3.53 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)
Pos3.54 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))
Pos3.55 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)
Pos3.56 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)
Pos3.57 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)
Pos3.58 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)
Pos3.59 Wi-Fi 7 MIMO Antennas for Metal-Housing Laptop
    Wen-Shan Chen and Wei-Ren Huang (Southern Taiwan University of Science and Technology, Taiwan)
Pos3.60 A Dual-Band Dual-Circularly Polarized Shared-Aperture Microstrip Antenna for LEO Satellite Communications
   Nannan Wang (Harbin Institude of Technology, China); Zixu Tang, Chengye Wang, Pengcheng Wang and Jinghui Qiu (Harbin Institute of
    Technology, China)
Pos3.61 Dual-Band Dual-Polarized Shared Aperture Traveling-Wave Antenna Using Hybrid Dual-Mode Floquet Excitation for Satellite ISAC
    Dongseop Lee and Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
Pos3.62 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)
Pos3.63 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)
Pos3.64 All Metal Inductively Connected Tightly Coupled Array (iTCA)
   Alpha Osman Bah (University of Technology Sydney, Australia & UTS, Australia)
Pos3.65 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)
Pos3.66 Novel Partially-Reflective-Surface Design Based on Asymmetric Compact Microstrip Resonant Cells for Wideband Gain
Enhancement
   Jhirat Mearnchu (Silpakorn University, Thailand); Danai Torrungrueng (King Mongkut's University of Technology North Bangkok, Thailand)
Pos3.67 Improved Reflection Characteristics for Oblique Incidence of Microwave Absorber Acting as an Antenna
    Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute & 3-6-1 Azuma-Cho, Japan); Takuji Arima (Tokyo University of
   Agriculture and Technology, Japan)
Pos3.68 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)
Pos3.69 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)
Pos3.70 Analysis of Frequency Characteristics of Human Body Shadowing Loss
   Ayumu Okuhigashi, Yoshiki Nakanishi, Hisato Iwai and Shinsuke Ibi (Doshisha University, Japan)
Pos3.71 Wideband Reconfigurable Dual Circularly- Polarized Magnetoelectric 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)
Pos3.72 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)
Pos3.73 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))
Pos3.74 Millimeter-Wave Wireless Power Transfer Technology for IoT Applications
   Jung Ick Moon (Electronics and Telecommunications Research Institute, Korea (South))
Pos3.75 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,
Pos3.76 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)
Pos3.77 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)
Pos3.78 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)
Pos3.79 Gain Improvement for 2x2 Patch Array Antenna by Using Metamaterial Based
    Peerasan Khamsalee and Auychai Yatongchai (Suranaree University of Technology, Thailand)
Pos3.80 Compact Dual-Band Microwave Sensor for Dielectric Sensing Using Complementary C-Shaped Resonators
   Pongphan Leelatien (Thammasat University, Thailand)
Pos3.81 Measurement of Propeller Modulation for ILS Flight Inspection by Drone
   Atsushi Kezuka and Shinji Saitoh (Electronic Navigation Research Institute, MPAT, Japan)
Pos3.82 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)
Pos3.83 A Low-Cost Solution for Efficient Wireless Communication in Cultivated Areas
    Patryk Kalkowski (Gdansk University of Technology, Poland); Łukasz Szczygielski (Gdańsk University of Technology, Poland); Krzysztof Nyka and
   Lukasz Kulas (Gdansk University of Technology, Poland)
Pos3.84 Printed Antenna Arrays with Heat-Spreader for Wi-Fi 6 MIMO Application
```

De-Lun Huang (PEGATRON Corporation, Taiwan)

Thursday, October 30 15:40 - 17:20

Kunio Sawaya (Tohoku University, Japan)

Koichi Tsune (Chubu University, Japan)

Tamami Maruyama (Hiroshima Institute of Technology, Japan)

17:00 Cubic Yagi-Uda Array Antenna for 500 MHz Band Rectenna
Keisuke Konno and Qiang Chen (Tohoku University, Japan)

Masato Wadahama and Kazuhiro Fujimori (Okayama University, Japan)

16:20 A Beam-Forming Array Antenna Based Wireless Powering Framework

4C4: Developments in Periodic Structures and Metasurfaces

Liu, Qirui Yu and Wentao Liang (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)

15:40 Large Language Model-Inspired Transformer Framework for Antenna Design

Jitu Prakash Dhar, Eisuke Nishiyama and Ichihiko Toyoda (Saga University, Japan)

Mineki Nakayasu and Hitoshi Shimasaki (Kyoto Institute of Technology, Japan)

15:40 Digest of Beyond 5G White Paper on Repeater, Metasurface and RIS/IRS

Takahiro Hayashi and Satoshi Ito (KDDI Research, Inc., Japan)

Makoto Taromaru (Fukuoka University, Japan)

Hidekazu Murata (Yamaguchi University, Japan)

16:00 Propagation Characteristics in Suburban Environment at 8GHz FR3 Spectrum for 6G

17:00 Terminal-Collaborated MIMO Systems: Initial Results of 25.9GHz Collaboration

9:00 Multifunctional Reconfigurable Antenna Arrays with Distributed Diode Control

9:40 A Polarization-Mixing Analog Beamforming (PMBF) System for 2D Beamwidth Control

**10:00** *Individually Steerable Analogue Multibeam Antenna with Wide-Angle Coverage*Ming Li, Shu-Lin Chen and Y. Jay Guo (University of Technology Sydney, Australia)

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

Inocent Mramba Calist and Minseok Kim (Niigata University, Japan)

16:20 Water-Level Estimation Using Wi-Fi Channel State Information and Neural Networks

16:00 Neural Network-Based Optimization of U-Slot Microstrip Antenna for Enhanced Performance

17:00 A CNN-Aided SDR-Based SFCW Ground Penetrating Radar System for Subsurface Utility Detection

16:40 Enhancing Urban Wireless Path Loss Prediction with Physics-Based Deep Learning and OpenStreetMap Features

(Mindanao State University-Iligan Institute of Technology, Philippines); Chi-Fang Huang (Tatung University, Taiwan)

Gia Khanh Tran (Institute of Science Tokyo, Japan); Kei Sakaguchi (Tokyo Institute of Technology & Fraunhofer HHI, Japan)

16:20 Evaluation and Experimental Comparison of WLAN-Based Device-Free Localization Using Distributed Antennas

16:20 Design Optimization of Metasurface Reflectors with Discrete-State Elements via Annealing Techniques

16:40 Indoor Experiment of Liquid Crystal Reconfigurable Intelligent Surface for mmWave Communications

Van Thang Nguyen and Jae-Young Chung (Seoul National University of Science and Technology, Korea (South))

[OS06] Propagation and Modeling in ITU-R SG3 (by Dr. Myung-Don Kim)

Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan)

Masato Yomoda (University of Niigata, Japan); Minghe Mao and Minseok Kim (Niigata University, Japan)

Myung-Don Kim, Jae-Joon Park, Juyul Lee, Byung Su Kang and Heon Kook Kwon (ETRI, Korea (South))

9:00 Scattering Analysis of Nano-Scale Chiral Structures in Ultraviolet Optical Vortex Using FDTD Method

Japan); Jerdvisanop Chakarothai (National Institute of Information and Communications Technology, Japan)

10:00 Reconstruction of Phase Information for THz Electromagnetic Beams Using Phase Retrieval Algorithms

Institute & 3-6-1 Azuma-Cho, Japan); Yukihisa Suzuki and Masao Taki (Tokyo Metropolitan University, Japan)

9:00 Experimental Verification of Doppler Spectrum Considering Moving Scatterers in V2V Communications

10:00 Measurement and Analysis of Transmission Loss in the Millimeter-Wave Band for Window Glasses

Adelaide & Defence Science Technology Group, Australia); Nghia Nguyen (Nextwaves Industries, Vietnam)

9:20 A Circularly Polarized Antenna with Optimized Symmetrical Axial Ratio Beamwidth

10:20 RF Assessment of the Mechanical Design of the Compact Antenna Test Range for HERTZ 2.0

9:00 ITO-PDMS Based Millimeter Wave Transparent Reflectarray Antenna for 5G Communications

10:00 Design and Complex Permittivity Control of Dry Phantoms with Carbon Fibers and Nanotubes

10:20 EMC Analysis of 275kV Transmission Lines: Impacts on Nearby Equipment and Pacemakers

Fauziahanim Che Seman (Universiti Tun Hussein Onn Malaysia, Malaysia); Mohd Fahrul Hassan (EMTEX, Malaysia)

Thailand, Thailand); Sathian Yutthanaboon and Usa Torteanchai (CATC, Thailand)
9:40 A W-Band Compact Wideband Vertically-Polarized Omnidirectional Antenna

10:20 Wideband Delay and Angular Profile Evaluation at 158 GHz in Indoor Office Environment

9:00 Conformal Design for 3D-Printable Leaky-Wave Antennas

and Jingrui Xu (Harbin Institute of Technology, China)

(Universiti Teknikal Malaysia Melaka, Malaysia)

Communications Technology, Japan)

Friday, October 31 11:00 - 12:40

Futatsumori (Electronic Navigation Research Institute, Japan)

Co., Ltd., Japan); Takashi Hikage (Hokkaido University, Japan)

11:00 Enhancing Societal Resilience Through ICT Innovations and Deployment

12:20 Probing Electromagnetic Exposure Around LEO VSAT Terminals

Jeong-Hae Lee (Hongik University, Korea (South))

Masuqi Inoue (National Institute of Information and Communications Technology, Japan)

11:40 Construction of a Multi-Antenna Evaluation System Using 3GPP-Compliant Signals

12:00 Dynamic Mode Group Selection Method for Beam Axis Misalignment in OAM Multiplexing

11:00 A Reconfigurable Circular Polarized Reflective Metasurface with Strip and Parasitic Patches

11:40 Multiwavelength Multiplexing Airy Vortex Wave Generation via Impedance Metasurface

Science and Technology of China, China); Weidong Chen (University of Science & Technology of China, 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)

11:20 A Quasi 4-Bit Reconfigurable Metasurface Antenna for Continuous Beam Steering

Yong-Hyun Nam and Jeong-Hae Lee (Hongik University, Korea (South))

12:00 A Small Single-Layer Phase Gradient Metasurface for Gain Enhancement

Jialiang Han and Hui Li (Dalian University of Technology, China)

Technology, Japan); Keisuke Konno (Tohoku University, Japan)

12:00 Optimized Simulation Technique for Radome Antenna Models

and Jinghui Qiu (Harbin Institute of Technology, China)

11:00 A Circularly-Polarized Reflectarray at 90-GHz Band

Information and Communications Technology, Japan)

14:40 Insole Antenna System for Detection of Elderly Wanderers

International Institute of Technology, Universiti Teknologi Malaysia, Malaysia)

14:00 Single-Feed Two-Layer PCB Design for Sequentially Rotated Dipoles

14:20 A Simple Technique Enhancing Spectral Performance for Planar Dipole Antennas

15:00 Patch Antenna Bandwidth Enhancement with Asymmetric Mushroom Structures

14:00 Some Experimental Results in Targets Imaging from Amplitude-Only Data

(Universidad de Malaga, Spain); Mario Pérez-Escribano (Universidad de Málaga, Spain)

14:00 Accuracy Evaluation of Indoor Multipath Estimation Using Color Images Method

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)

14:40 Sub-Terahertz Ultra-Wideband Achromatic Cascaded Waveguide Polarizer

Christophe Fumeaux (University of Queensland, Australia); Nghia Nguyen (Nextwaves Industries, Vietnam)

Johannsen (Eindhoven University of Technology, The Netherlands)

15:20 Radio Area Evaluation of Base Station Antennas in a Stadium

Italy); Yiannis Vardaxoglou (City University of Hong Kong, China.)

Haruta Yamada (Hokkaido University, Japan)

Masayuki Nakano (KDDI Research, Japan)

Tetsuya Ueda (Kyoto Institute of Technology, Japan)

Defense Academy, Japan)

Technology, Japan)

Friday, October 31 14:00 - 15:40

Hiroyasu Sato (Tohouku University, Japan)

11:20 Axi-Symmetric Parabolic Reflector for Directive Beam for ISL

11:40 Effect of Shaped Sub-Reflector Performance for Spherical Reflector Antenna

12:00 Broadband W-Band Single-Layered Circularly Polarized Reflectarray

12:20 Sub-THz Beam Selection Based on Millimeter-Wave Beam Information

12:20 An Efficient Technique for Solving Large Scale Honeycomb Arrays

(ESTEC, The Netherlands)

Scale FDTD Analysis

9:20 Channel Measurements and Characteristics for Sub-Terahertz Band in Urban Environment

Technologies, Japan); Michael Millhaem and Roger Nichols (Keysight Technologies, USA)

9:40 Outdoor Spatial Scattering Measurements from Complex Structures at 92-110 GHz

9:20 Exploring Radio Propagation Characteristics of Data Center Environments at 415 GHz

9:40 Sub-THz Propagation Channel Characteristics in an Outdoor Open Square Environment

10:20 Sub-Terahertz Path Loss Measurements in Urban and Suburban Environments

9:20 An Investigation on the Frequency-Dependent FDTD Model of Dirac Semimetals

Communications Technology, Japan); Yukihisa Suzuki (Tokyo Metropolitan University, Japan)

Suzuki (Tokyo Metropolitan University, Japan); Yoshinori Tatematsu (University of Fukui, Japan)

5D1: [OS18] Indoor and Outdoor Propagation (by prof. Naoki Kita)

(National Institute for Fusion Science & Nagoya 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))

Osamu Muta, Fuma Kunihiro and Shunsuke Shimizu (Kyushu University, Japan); Tomoki Murakami, Shinya Otsuki and Hanae Otani (NTT

16:40 A Comparison of Eigenvalues and Channel Capacity Between OAM Mode Multiplexing and LoS MIMO with Linear or Rectangular

4F4: [OS21] Analysis and Measurement for Reconfigurable Intelligent Surfaces (RIS) (by Dr. Mayumi

Masayuki Shirakawa, Daisuke Hosokawa, Kohei Suzuki, Yosuke Saiki, Gilbert S Ching and Kenshi Horihata (Kozo Keikaku Engineering Inc., Japan)

Hiroki Aoki, Takuya Ohto and Takahiro Hayashi (KDDI Research, Inc., Japan); Mitsutaka Okita, Kazuki Matsunaga, Masayuki Ikari, Daijiro Takano

Masamichi Yonehara, Nobuki Hiramatsu, Hiromichi Yoshikawa and Takafumi Uehama (Kyocera Corporation, Japan); Hisamatsu Nakano (Hosei

Fanchao Zeng (University of Technology Sydney, Australia); Can Ding (University of Technology Sydney (UTS), Australia); Y. Jay Guo (University

10:20 Realization of Constant Amplitude Standing Wave Excitation Through Multi-Level Coupling Control in a Reconfigurable Series-Fed

9:00 Antenna Height Impact Analysis on Measured Path Loss and Delay Spread at Sub-6 GHz and mmWave Bands in an Urban

Jinhyung Oh (Electronics and Telecommunications Research Institute, Korea (South)); Jong Ho Kim (ETRI, Korea (South))

Azril Haniz and Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Takeshi Matsumura (National

Chenxu Wang (National Institute for Fusion Science, Japan); Hideki Kawaguchi (Muroran Institute of Technology, Japan); Hiroaki Nakamura

Takumi Tamaki, Takuto Makimoto and Jun Shibayama (Hosei University, Japan); Jerdvisanop Chakarothai (National Institute of Information and

Hinata Yagi (Tokyo Metolopolitan University, Japan); Yukihisa Suzuki (Tokyo Metropolitan University, Japan); Jun Shibayama (Hosei University,

Shunichi Fujimori (Tokyo Metropolitan University, Japan); Masafumi Fukunari (University of Fukui, Japan); Alfred Kik, Toshio Kamijo and Yukihisa

Hiroaki Arai (Tokyo Metropolitan Industrial Technology Research Institute, Japan & Tama Techno Plaza, Japan); Misato Akiyama and Hiroyasu Sano (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Teru Obata (Tokyo Metropolitan Industrial Technolog

Tatsuya Kutsukawa (Univerasity, Japan & Chiba Institute of Technology, Japan); Hiroaki Nakabayashi (Chiba Institute of Technology, Japan)

Minoru Inomata and Ryotaro Taniguchi (NTT, Japan); Wataru Yamada (NTT Corporation, Japan); Nobuaki Kuno (NTT DOCOMO, INC., Japan); Koshiro Kitao (NTT DOCOMO, INC., Japan); Takahiro Tomie and Satoshi Suyama (NTT DOCOMO, INC., Japan); Tetsuaki Ikoma (Keysight

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); Demos Serghiou, Tim Brown, Ali Ali and Pei Xiao (University of Surrey, United Kingdom); Mohsen Khalily (University of Surrey, United Kingdom); Mohsen Khalily (University of Surrey, United Kingdom); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain)); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), United Kingdom (Great Britain); Mohsen Khalily (University of Surrey), University (University of Surrey), University (University of Surrey), University (Universit

Masaya Takahashi and Shoma Tanaka (SoftBank Corp., Japan); Sho Kimura, Ho-Yu Lin, Akihiro Sato and Hideki Omote (Softbank Corp., Japan)

Nobuaki Kuno (NTT DOCOMO, INC, Japan); Koshiro Kitao (NTT DOCOMO, INC., Japan); Takahiro Tomie and Satoshi Suyama (NTT DOCOMO, INC, Japan); Minoru Inomata (NTT, Japan); Wataru Yamada (NTT Corporation, Japan); Ryotaro Taniguchi (NTT, Japan); Michael Millhaem

Patrick J Bartley (The University of Queensland, Australia); Christophe Fumeaux (University of Queensland, Australia); Nic Lawrence (University of

Phanuphong Boontamchauy (CATC Thailand, Thailand); Pongphol Aeimopas and Manurak Rattanasuttikan (Civil Aviation Training Center of

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

Sami Barouki (CEA-Gramat, France & Xlim Research Institute, France); Patrick Hoffmann (CEA, France); Alain Reineix (University of Limoges,

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

Muhammad Inam Abbasi and Altaf Ahmed (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); S. Kesarajah and Imran Mohd Ibrahim

9:20 Statistical Evaluation of Electromagnetic Interference Characteristics in the Aircraft Radio Altimeter Frequency Band Using Large-

Kohsuke Ushimaru, Takashi Hikage, Manabu Yamamoto and Manabu Omiya (Hokkaido University, Japan); Kazuyuki Morioka and Shunichi

Takehito Sato (E&C Engineering K.K, Japan); Tamaki Noto and Koji Nakagawa (E&C Engineering, Japan); Toshiyasu Tanaka (Microwave Factory

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

Ryosuke Hoshi (Waseda University, Japan); Yasunori Yagi (NTT Corporation, Japan); Doohwan Lee (NTT, Japan); Fumiaki Maehara (Waseda

Amina Fellan (Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau, Germany); Hans D. Schotten (University of Kaiserslautern,

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

5C2: [OS02] Frontiers of Computational Electromagnetics (by prof. Keisuke Konno & prof. Ming Jiang)

Nozomi Haga (Toyohashi University of Technology, Japan); Jerdvisanop Chakarothai (National Institute of Information and Communications

Keisuke Konno (Tohoku University, Japan); Nozomi Haga (Toyohashi University of Technology, Japan); Jerdvisanop Chakarothai (National

5D2: [OS30] Enhancing Radio Propagation Technologies Driven by Machine Learning (by Dr. Tatsuya

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

Daisuke Hosokawa, Satoshi Iwasaki and Kenshi Horihata (Kozo Keikaku Engineering Inc., Japan); Yukiko Kishiki (Kozo Keikaku Engineering,

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

Li Zhang (Harbin Institute of Technology, China & School of Electronics and Information Engineering, China); Yayun Cheng, Kunmiao Huang

Alex Evrard (Université de Rennes, France); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Andrea Guarriello (Thales

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

11:00 Frequency Characteristics of Circuit Model of Undersea Loop Coupler Derived by Impedance Double Expansion Method

11:20 Mesh-Free Modeling of Two-Dimensional Infinite Periodic Structure Using Green's Function for Method of Moments

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)

Weijian Ran and Ming Jiang (University of Electronic Science and Technology of China, China)

Weijian Ran, Ming Jiang and Lin Lei (University of Electronic Science and Technology of China, China)

11:00 CNN-Based Path Loss Prediction Using Overhead and Side Images Considering Antenna Patterns

11:40 Virtual 3-D City Augmentation and Its Application to Learning-Based Radio Propagation Prediction

Ching-Ting Huang, Ming-Che Li and Tzyh-Ghuang Ma (National Taiwan University of Science and Technology, Taiwan)

Alenia Space, France); Hervé Legay (Thalès Alenia Space, France); Ronan Sauleau (Universite de Rennes, France)

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)

11:00 Assessment of Whole-Body Exposure to Electromagnetic Fields from Beamforming Arrays Using Low-Rank Approximation

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

12:00 Whole-Body SAR Evaluation Under Far-Field Exposure with Daily Posture Variability: Toward an Epidemiologically Relevant

12:20 Numerical Estimation of Temperature Increase Due to Ohmic Loss on Implanted Metal Plates Exposed to Microwaves

14:00 A Novel RFID Gate Station with Cylindrical Reflector for High-Accuracy Textile Tracking in Smart Hospitals

15:20 Input Resistance Step-Up of Normal-Mode Helical Antennas (NMHA) Using Dual and Triple-Folded Structures

15:00 Application of Zeroth-Order Resonant Antennas in RFID Systems Operating in the UHF Band

**11:40** Evaluation of Multi-Frequency Electromagnetic Exposure Using Numerical Smartphone Models Considering Various Usage Conditions
Homei Fujita, Tsugumi Nishidate, Kazuyuki Saito and Masaharu Takahashi (Chiba University, Japan); Tomoaki Nagaoka (National Institute of

Koki Kusakabe, Takashi Hikage and Toshihiko Nishimura (Hokkaido University, Japan); Tatsuya Kashiwa (Kitami Institute of Technology, Japan);

Shuhei Waki and Takashi Hikage (Hokkaido University, Japan); Tomoaki Nagaoka (National Institute of Information and Communications

Titipong Lertwiriyaprapa (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,

Yoshihito Nakado (Kyoto Institute of Technology, Japan); Kohei Enomoto, Yuto Mitsui and Yosuke Hiraiwa (DENSO WAVE Incorporated, Japan);

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

Héctor Ortega-González (Eindhoven University of Technology, The Netherlands); Jean-Philippe Fraysse (Thales Alenia Space, France); Ulf

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

Junyi Chen (The University of Adelaide, Australia); Shengjian Jammy Chen (Flinders University, Australia & The University of Adelaide, Australia);

Florindo Bevilacqua, Amedeo Capozzoli and Claudio Curcio (Università di Napoli Federico II, Italy); Francesco D'Agostino, Flaminio Ferrara and Rocco Guerriero (University of Salerno, Italy); Angelo Liseno (Università di Napoli Federico II, Italy); Massimo Migliozzi (University of Salerno,

Takahiro Tomie and Satoshi Suyama (NTT DOCOMO, INC, Japan); Koshiro Kitao (NTT DOCOMO, INC., Japan); Nobuaki Kuno (NTT DOCOMO,

Kento Sugiyama, Yasuyuki Ninomiya, Yoto Emori, Kenshi Horihata, Akio Hasegawa and Hiroyuki Yokoyama (Advanced Telecommunications

Hongyu Duan, Ke Guan, Danping He, Lei Yang and Tianwei Wu (Beijing Jiaotong University, China); Chuangxin Jiang (ZTE Corporation, China)

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 (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of

14:40 High-Temperature Superconducting (HTS) Josephson Mixers Integrated with Sub-Terahertz Leaky-Wave Antennas

DS07] HAPS mobile communication systems (by prof. Yoshichika Ohta)

15:00 Design of a Hollow-Waveguide Slot Array Antenna for a Channel Sounder Excited by a Standing Wave in the 150 GHz Band

Ryouske Sakurai and Jiro Hirokawa (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan); Minoru Inomata

**14:40** Intelligent Deployment for Post-Earthquake Response: Ray Tracing-Assisted Connectivity for Indoor Rubble-Trapped Victims
Lawrence Materum, Rafael Alfonso Alegrio, Maria Gianina Bernardo, Marielle Faye Enriquez and Daniel Christopher Monis (De La Salle

14:20 Propagation Path Reutilization for Efficient Ray Tracing Method in Parameter Studies of Wireless Power Transmission

15:00 Accelerating Ray Tracing Using Non-Uniform and Restricted Ray Launching Directions in Urban Areas

15:20 Measurement and Deep Learning-Based Power Prediction of the Scatterer for ISAC Channels

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

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

and Communications Technology, Japan); Tarik Abd Latef (University of Malaya, Malaysia)

Naomi Tamura, Yu Ait Bamai, Atsuko Ikeda and Reiko Kishi (Hokkaido University, Japan)

12:00 Deep Learning-Based Detection Using Different Polarization Passive Millimeter-Wave Images

11:20 A Method for Predicting Path Loss Using PointNet and Point Cloud Data of Buildings

Toshihiro Sumitani, Hirofumi Sasaki, Ken Hiraga and Riichi Kudo (NTT Corporation, Japan)

Zarismail Abd Rahman (Universiti Tun Hussein Onn, Malaysia); Syarfa Sapuan (University Tun Hussein Onn Malaysia (UTHM), Malaysia);

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

10:00 Realization and Validation of an L-Band Local Plane-Wave Illumination Bench for Electromagnetic Susceptibility Studies

(Keysight Technologies, USA); Tetsuaki Ikoma (Keysight Technologies, Japan); Roger Nichols (Keysight Technologies, USA)

9:40 Temperature Sensitivity Analysis of Waveguide-Type and Kretschmann-Type SPR Sensors in the Terahertz Band Using the FDTD

10:20 Analysis of Leakage Magnetic Fields Including Harmonic Components in Wireless Power Transfer with a Sandwich Structure

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

Yuto Kato (National Institute of Advanced Industrial Science and Technology, Japan); Michitaka Ameya (AIST, Japan); Atsushi Sanada (The

17:00 Design of Transmission-Type Metasurfaces and Evaluation of the Received Power Enhancement for a 5G Base Station

15:40 Numerical Accuracy Evaluation for Scattering Waves by Multiple Plane Gratings

16:00 Deep Learning for Radome FSS Multifunctionality Prediction via Bayesian Optimized U-Net

16:20 A Wide Passband Frequency Selective Absorber Based on Cascading Different Parallel Resonators

4B4: Wireless Power Transfer Technologies

(Japan Aerospace Exploration Agency, Japan)

Room A

Room B

(Invited Paper)

University, Japan)

Room D

Room E

Room F

Corporation, Japan)

University of Osaka, Japan)

University, Japan)

Friday, October 31

Room A

Antenna

Room B

Room C

Method

Room D

Room E

Hikage)
Room F

Room A

(Invited Paper)

University, Japan)

Germany)

Room B

Room C

Nagao)
Room D

Room E

Hikage)

Room F

Room A

Room B

Room D

Room E

Room F

INC, Japan)

University, Philippines)

Technology, Japan)

He Zhu (CSIRO, Australia)

Research Institute International, Japan)

Maiko Iwatani (Mitsubishi Electric Corporation, Japan)

5E3: Millimeter wave and Terahertz antenna II

(NTT, Japan); Wataru Yamada (NTT Corporation, Japan)

15:20 Dielectric Fan-Shaped Antenna for Millimeter Wave Band

14:00 Best Lens Antenna Shape for Multibeam with Negative Refractive Index

Keisuke Sato (Denki Kogyo Co. Ltd., Japan); Hisamatsu Nakano (Hosei University, Japan)

14:00 Evaluating Inter-HAPS System Interference with TDD Frequency and Regenerative Payload

(Invited Paper)

Kingdom (Great Britain))

Environment

(Invited Paper)

and Shinichiro Oka (Japan Display Inc., Japan)

Friday, October 31 9:00 - 10:40

of Technology Sydney, Australia)

University, Korea (South))

Array in Free Space

and Science (KRISS), Korea (South))

Yuya Oba (Tokyo City University, Japan)

4D4: ML and AI for AP Applications

Chang Ge and Qiang Chen (Tohoku University, Japan)

Bangkok, Thailand); Hsi-Tseng Chou (National Taiwan University, Taiwan)

Pos3.85 Design of Differential-Antenna (DA)-Based Sensors for Characterization of Dielectric Materials

15:40 Invention of Yagi-Uda Antenna and Its Application to Long-Distance UHF Communications

15:40 Ultra-Low Input Power Drivable IoT Wireless Sensor Using Energy Harvesting from Wi-Fi

Yu-Feng Chen and Wen-Jiao Liao (National Taiwan University of Science and Technology, Taiwan)

Koki Maeda (University of Saga, Japan); Eisuke Nishiyama and Ichihiko Toyoda (Saga University, Japan)

16:40 A Circular Patch High-Density Array Antenna for High Output-Power Rectenna Arrays

16:00 APAA Pattern Reconfiguration Field Test Using an Aircraft for SPS Demonstration

Kittima Lertsakwimarn, Danai Torrungrueng, Kitiphon Sukpreecha and Kittisak Phaebua (King Mongkut's University of Technology North

16:20 Design and Development of Medium-Gain Cross Multi-Beam Antenna Suitable for Future Mobile Communication Systems

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

17:00 Application of BCITL-Based Wireless-Power-Transmission (WPT) Model for Material Level Sensors Using UHF-RFID Systems

Mongkut's University of Technology North Bangkok, Thailand); Hsi-Tseng Chou (National Taiwan University, Taiwan)

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

Hideaki Wakabayashi (Okayama Prefectural University, Japan); Masamitsu Asai (Kinki University, Japan); Jiro Yamakita (Okayama Prefectural

Dal-Jae Yun, Haewon Jung, Jin-Hyeok Kim, In-Ho Lee and Young-Pyo Hong (Korea Research Institute of Standards and Science, Korea (South)); Min-Sung Kim and Jong-Cheon Lee (Agency for Defense Development, Korea (South)); In-June Hwang (Korea Research Institute of Standards

Dengshuang Yi, JiaHui Fu and Jiakai Zhang (Harbin Institute of Technology, China); Yizhi Zhang (Harbin Institute of Technolog, China); Yiding

17:00 Experimental Studies About Cross-Shaped Stripline Interval Dependency of as Notch-Filter Properties in Frequency-Selective Sheets

Jesrey Martin S Macasero and Rochelle M Sabarillo (Mindanao State University - Iligan Institute of Technology, Philippines); Olga Joy Gerasta

16:40 A Novel Rectenna Array Inspired by the Yagi-Uda Loop Antenna for Extended Wireless Power Transmission Distance