

Time (Tokyo)	Magnolia Hall	Rose	Cattleya	Orchid	Plumeria
Wednesday, October 21					
09:00-09:30	1a0Opening Ceremony				
09:30-10:30	1a1Keynote speech				
10:30-10:50	1aCoffee Break				
10:50-12:10	1a2-HSPS01 - Innovative Materials and Antenna Applications	1a2-ASPS12-(1) - Practical Millimeter Wave and THz Wireless Systems	1a2-BSPS05 - Antenna Measurement Techniques Association (AMTA): Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies	1a2-CA01 A02 Antenna Design	1a2-DA08 A09 Reflectors, Reflect Arrays, and Transmitting Arrays
12:10-12:30					
12:30-14:00	1a3Lunch				
14:00-15:00		1p1-ASPS12-(2) - Practical Millimeter-Wave and THz Wireless Systems: Characterization, Link Design, and Applications	1p1-BSPS16 - Research in the Fields of Radar, Telecommunications and Electronic Warfare	1p1-CSPS15 Antenna Systems and Architectures	1p1-DE01 Modeling, Simulations, and Predictions of Measurements in Realistic Environments
15:00-15:20					
15:20-15:40				1p1-C'SPS08 - Antenna and sensor for agricultural applications	
15:40-16:00	1pacCoffee Break				1pacCoffee Break
16:00-16:20			1pbdCoffee Break	1p2-CA04 A07 A10 A11 Advanced Antenna Arrays and Beamforming, MIMO radars	1p2-DA06 Antenna Systems and Architectures
16:20-17:20		1p2-ASPS06 - UAV Applications	1p2-BM06 Microwave, Millimeter-Wave, and THz Imaging Systems		
17:20-17:40					
18:00-20:00	1p3Exhibition with cocktail				
Thursday, October 22					
09:00-09:40		2a1-ASPS13 - Precise Microwave, Mm-wave and THz Measurement and Calibration		2a1-CA19 A17 A16 Antennas for Vehicles, Power transfer, and Medicine/ Medical Applications	2a1-DM09 M10 Antenna Testbeds Radar & RCS
09:40-10:20	2a1-HSPS09 - Microwave/Millimeter-wave imaging and applications		2a1-BA12 E05 RFID, Sensors & Systems		
10:20-10:40					
10:40-11:00	2aCoffee Break				
11:00-12:00	2a2Keynote Speech 2				
12:00-13:00	2a3Lunch				
13:00-14:20		2p1-ASPS18-(1) - Electromagnetic Signal and Information Theory (ESIT) for Next-Generation Wireless Systems	2p1-BSPS10 - Antenna Metrology, and Precision Antenna Measurement (NMI Session)	2p1-CM03 Antenna Metrology, Precision Antenna Measurements	2p1-DE02 E04 Radar, Sensing AI
14:40-15:00	2p1Coffee Break				
15:00-15:40		2p2-ASPS18-(2) - Electromagnetic Signal and Information Theory (ESIT) for Next-Generation Wireless Systems	2p2-BM05 M07 MMW/THz/Quasi-optical Antenna Measurement	2p2-CE06 E08 Metamaterial & Quasi-optical	2p2-DE10 M01 M02 Antenna & EM measurement
15:40-16:20		2p2-A'SPS19-(1) - Measurements, Modeling, and Wave Propagation in Complex Indoor Environments for Next-Generation Wireless Systems			
16:20-16:40					

Time (Tokyo)	Magnolia Hall	Rose	Cattleya	Orchid	Plumeria
16:40- 17:00	2p2Coffee Break				
17:00- 18:20		2p3-ASPS19-(2) - Measurements, Modeling, and Wave Propagation in Complex Indoor Environments for Next-Generation Wireless Systems	2p3-BSPS22 - Photonic Signal Processing for Mobile Networks	2p3-CM02 Electromagnetic Measurement Methods and Techniques	2p3-DM04 M13 M14 M15 Dosimetry, Satellite, etc.
18:20- 18:40					
19:00- 22:00	2p4Gala dinner				

Friday, October 23

09:00- 10:20	3a1-HSPS20 - AI-Enabled Antennas and RF Sensing Systems for Smart Applications	3a1-ASPS14 - Antenna Measurement and Application from IEICE Technical Committee on Antenna Measurements and Testing	3a1-BSPS21 - Joint Special Session with IEEE IWEM 2026	3a1-CA04 Wideband and UWB Antennas	
10:20- 10:40	3aCoffee Break				
10:40- 12:00			3a2-BA13 A14 A15 MMW, THz, Next-G Antenna	3a2-CM11 M12 Absorbers & UAV Drone	
12:00- 12:20	3a2-HSPS04 - Millimeter-Wave and Sub-THz Antennas and Measurement Techniques	3a2-ASPS03 - Electromagnetic Inverse Scattering and Imaging: Theory and Applications			
12:20- 12:40					
12:40- 13:40	3a3Lunch				
13:40- 15:00	3p1-HSPS11 - Standardization Activities in IEC TC103	3p1-ASPS23 - Compact Antennas: Challenges, Innovations, and Recent Applications.	3p1-BSPS07 - Antenna-Integrated Photonic Devices and Applications		
15:00- 15:20					
15:20- 15:50	3p2Closing Ceremony				

Wednesday, October 21

Wednesday, October 21 9:00 - 9:30

1a0: Opening Ceremony

Room: Magnolia Hall

Chair: Naruto Yonemoto (Electronic Navigation Research Institute & National Institute of Maritime, Port and Aviation Technology, Japan)

Wednesday, October 21 9:30 - 10:30

1a1: Keynote speech

Room: Magnolia Hall

Chair: Naruto Yonemoto (Electronic Navigation Research Institute & National Institute of Maritime, Port and Aviation Technology, Japan)

Wednesday, October 21 10:30 - 10:50

Wednesday, October 21 10:50 - 12:30

1a2-A: SPS12-(1) - Practical Millimeter Wave and THz Wireless Systems

Room: Rose

Chairs: Bo Kum Jung (Waseda University, Japan), Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

113 *Design of a W-Band High-Gain Lens Antenna Fed by a Dual-Circularly Polarized Patch Array* *Special Session Papers*

Seiji Nishi and Kazuhiko Tamesue (Waseda University, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

130 *Demonstration of IEEE 802.15.3d-Compliant 300 GHz Wireless Links in a Railway Communication Scenario* *Special Session Papers*

Ogaki Arata and Ryo Shatari (Waseda University, Japan); Masataka Sugiyama (SED Limited, Japan); Kunihiisa Jitsuno and Kota Nakazawa (Waseda University, Japan); Satoko Ryuo, Yuta Hosokawa and Yuki Ogawa (Railway Technical Research Institute, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

136 *Phase-Dependent Interference Between Overlapping HD2/IMD2 and IMD3 Distortion Components in Broadband Nonlinearity Measurements* *Special Session Papers*

Hang Mi (University of Waseda, Japan); Yoji Orihara (Waseda University, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

138 *216-GHz Up-Conversion Mixer with Transformer-Based Interstage Matching in 65nm CMOS* *Special Session Papers*

Minh Duc Nguyen, Shinsuke Hara and Kentaro Furusawa (National Institute of Information and Communications Technology, Japan); Norihiko Sekine (National Institute for Information and Communications Technology, Japan)

179 *Half-Wave Voltage Mismatch in Tunable-Linewidth Lasers for Terahertz Phase Noise Emulation* *Special Session Papers*

Chen Zheng (Waseda University, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

1a2-B: SPS05 - Antenna Measurement Techniques Association (AMTA): Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies

Room: Cattleya

Chairs: Michitaka Ameya (AIST, Japan), Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology & 7G aa Corporation, Japan)

43 *Laplacian Filter-Based Fitting Range Optimization for near-Field Gain Estimation of a Circularly Polarized Cross-Dipole Antenna in Lossy Medium* *Special Session Papers*

Aale Muhammad, Tomu Ono and Nozomu Ishii (Niigata University, Japan); Yuto Shimizu and Kensuke Sasaki (National Institute of Information and Communications Technology, Japan)

88 *Cross-Validation of Area-Corrected Monostatic-to-Bistatic Theorems for 5 GHz Polarimetric RIS Characterization* *Special Session Papers*

Florian Reher, Henrik Jansen and Dirk Heberling (RWTH Aachen University, Germany)

77 *Amplitude Compensation of Pseudo-Scale Models via Frequency Adjustment and Its Phase Effects* *Special Session Papers*

Nozomu Ishii and Sho Ito (Niigata University, Japan)

109 *Antenna Radiation Pattern Measurement Using an Antenna-Coupled Electrode Electro-Optic Modulator at 80 GHz* *Special Session Papers*

Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology & 7G aa Corporation, Japan); Michitaka Ameya (AIST, Japan); Masahiro Sato and Masatoshi Onizawa (SEIKOH GIKEN, Japan); Hiroshi Murata (Mie University, Japan)

153 *Free Space Material Characterization System for Future Communication Applications* *Special Session Papers*

Jae-Yong Kwon and Sangsu Lee (Korea Research Institute of Standards and Science, Korea (South))

Wednesday, October 21 10:50 - 12:10

1a2-C: A01 A02 Antenna Design

Room: Orchid

Chair: Claire Migliaccio (Université Côte d'Azur, France)

18 *Design of Multi-Ring Circular Antenna Arrays Based on Deterministic Artificial Intelligence Models*

Naoufel Ismail (INSAT, Tunisia); Philippe Descamps (GREYC, France & Ensicaen, France)

125 *Sheathed Dipole Antenna with an Outer Medium for Underground Massive IoT Communications*

Maki Arai (Shibaura Institute of Technology, Japan); Kiyoshi Egawa (Kyowa Electronic Instruments, Japan); Naoki Wakamiya (Osaka University, Japan); Kenji Leibnitz (NICT, Japan); Ferdinand Peper (National Institute of Information and Communications Technology, Japan); Mikio Hasegawa (Tokyo University of Science, Japan)

162 *Four Beams Passive Reflectarray in D-Band*

Paul Jaurel Seri (Universié Côte d'Azur, France); Claire Migliaccio and Jérôme Lanteri (Université Côte d'Azur, France)

210 *Compact Square Ring DGS Integrated Shorted Patch Antenna for STAR Applications*

Yash Srivastava and Amandeep Singh Brar (Birla Institute of Technology and Science, India); Rajnish Kumar Shivam (Central University of Jammu, India); Subhendu Chakraborty (CSIR Central Electronics Engineering Research Institute, India & Academy of Scientific and Innovative Research (AcSIR), India); Subhradeep Chakraborty (Central Electronics Engineering Research Institute, Pilani, India); Dinesh Rano (Birla Institute of Technology and Science, Pilani, Rajasthan, India & BITS Pilani, India); Ayan Kumar Bandyopadhyay (CSIR CEERI, India)

Wednesday, October 21 10:50 - 12:30

1a2-D: A08 A09 Reflectors, Reflect Arrays, and Transmitting Arrays

Room: Plumeria

Chair: Jerome Lanteri (Université Cote d'Azur - LEAT, France)

23 Steerable Reflector Antenna with a Fixed Feed System for LEO Feeder Links

Yun Sohyeun, Man Seok Uhm, Changsoo Kwak and Dong-pil Chang (ETRI, Korea (South))

34 Dual-Polarized Dielectric-Loaded Flared Horn Compact Range Feed

Zhenyu Li (Beihang University, China); Yong Fan (Beijing Institute of Spacecraft System Engineering, China); Zhengpeng Wang (Beihang University, China)

36 Design of a 170 GHz Transmission Line for Plasma Heating in a Gas-Dynamic Multiple-Mirror Trap

Anton Gashturi, Mikhail Yu. Shmelev and Dmitry I. Sobolev (Institute of Applied Physics of Russian Academy of Sciences, Russia); Alexey V. Palitsin and Vladimir I. Belousov (Institute of Applied Physics of the Russian Academy of Sciences, Russia); Mikhail Glyavin and Gregory Denisov (Institute of Applied Physics RAS, Russia); Mikhail D. Proyavin and Alexandr G. Shalashov (Institute of Applied Physics of the Russian Academy of Sciences, Russia)

42 Design and Optimization of a 1-Bit Wideband Linearly Polarized Unit-Cell in K-Band

Marc Josias Manga Manga (Université Côte d Azur, France); Jérôme Lanteri (Université Côte d'Azur, France); Jean-Yves Dauvignac (Université Côte d'Azur, CNRS, LEAT, France)

164 Snell-Guided Coverage Estimation Model for Static Metasurface

Ryusei Hinonishi (Tohoku University, Japan); Ryusei Hinonishi (Japan)

1a2-H: SPS01 - Innovative Materials and Antenna Applications

Room: Magnolia Hall

Chairs: Karu Esselle (University of Technology Sydney, Australia), Cristina Ponti (Roma Tre University, Italy)

81 Gain Enhancement of a Surface Mounted Short Horn Antenna *Special Session Papers*

Maira Islam Nabeel, Purna B. Samal, Karu Esselle and Dush Thalakatuna (University of Technology Sydney, Australia)

177 Bandwidth Enhancement of 2-D Dielectric Photonic Crystal Leaky-Wave Antenna *Special Session Papers*

Ludovica Tognolatti and Alessandro Romano (Roma Tre University, Italy); Vakhtang Jandieri (Nagoya Institute of Technology, Japan & University of Duisburg-Essen, Germany); Cristina Ponti, Giuseppe Schettini and Paolo Baccarelli (Roma Tre University, Italy)

188 An Electromagnetically Transparent S-Band Dipole for Shared-Aperture S/X-Band Antenna *Special Session Papers*

Dush Thalakatuna, Karu Esselle and Ardra George (University of Technology Sydney, Australia); Khushboo Singh (University of Technology Sydney, Australia & Macquarie University, Australia)

218 Fabrication of Electromagnetic Metasurfaces via Microfabrication Technologies on Transparent Substrates for 5G/6G Wireless Applications *Special Session Papers*

Giada Marchi and Alvis Bagolini (Center for Sensors and Devices Fondazione Bruno Kessler, Italy); Emanuela Proietti and Romolo Marcelli (Institute for Microelectronics and Microsystems National Research Council of Italy, Italy); Giovanni Capoccia (National Research Council of Italy, Italy); Leandro Lorenzelli (Center for Sensors and Devices Fondazione Bruno Kessler)

181 Dual-Polarized Reconfigurable Intelligent Surface Based on Jerusalem Cross for Sub-6 GHz Band *Special Session Papers*

Indula Munasinghe (University of Moratuwa, Sri Lanka); Dush Thalakatuna (University of Technology Sydney, Australia); Khushboo Singh (University of Technology Sydney, Australia & Macquarie University, Australia); Chamira U. S. Edussooriya (University of Moratuwa, Sri Lanka); Karu Esselle (University of Technology Sydney, Australia)

Wednesday, October 21 12:30 - 14:00

Wednesday, October 21 14:00 - 15:40

1p1-A: SPS12-(2) - Practical Millimeter-Wave and THz Wireless Systems: Characterization, Link Design, and Applications

Room: Rose

Chairs: Bo Kum Jung (Waseda University, Japan), Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

112 Millimeter-Wave Photonic Mixer Architecture Using an Integrated Dual-Parallel IQ Modulator *Special Session Papers*

Qingchuan Huang (University of Waseda, Japan); Naoki Yamamura (Waseda University); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

133 Measurement and Challenges of THz Scattering from 3D-Printed Random Rough Surfaces *Special Session Papers*

Riki Nishidono, Yuta Amma, Riku Yoshino and Sho Saito (Waseda University, Japan); Keizo Inagaki (National Institute of Information and Communications Technology, Japan & Waseda University, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

163 Human Body Scattering and LoS/NLoS Propagation Characterization at 60 GHz Toward Wearable BAN-ISAC Applications *Special Session Papers*

Lijia Liu, Yuki Tomita and Atsushi Kanno (Nagoya Institute of Technology, Japan)

134 Numerical Analysis of Scattering Properties in High-Dynamic Rain Environments at 300 GHz *Special Session Papers*

Bo Kum Jung (Waseda University, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

212 Experimental Evaluation of ZF-SIC for 300-GHz-Band 2x2 MIMO-SDM Transmission *Special Session Papers*

Kazuhiro Tamesue and Seiji Nishi (Waseda University, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan)

Wednesday, October 21 14:00 - 16:00

1p1-B: SPS16 - Research in the Fields of Radar, Telecommunications and Electronic Warfare

Room: Cattleya

Chairs: Pouliguen Philippe (DGA, France), Pierre Sabouroux (Institut Fresnel, France)

89 Control of the Electromagnetic Properties of Absorbers: Impact of Processing Conditions and Structuring *Special Session Papers*

Jérémi Mancassola (Université de Bretagne Occidentale & Agence Innovation Défense (DGA), France); Vincent Laur (Lab-STICC / University of Brest, France); Lana Damaj (Lab-STICC, France); Sophie Lasquellec (University of Brest, France); Jérémy Thoraval (Lab-STICC (UBO), France); Philippe Pouliguen (Agence de l'Innovation de Défense, Paris, France); Lucile Amory (Agence Innovation Défense, France); Alexis Chevalier (University of Brest & Lab-STICC UMR CNRS 3192, France)

25 Hybrid Modeling of Long-Range Wave Propagation Using a Fast Wavelet Method in the Presence of Metallic Radar Targets *Special Session Papers*

Corentin Carré and Ali Khenchaf (Lab-STICC UMR 6285, France); Pouliguen Philippe (DGA, France)

100 Microwave-Based Non-Invasive Multi-Antenna Physiological Sensor for Soldier Performance Optimization *Special Session Papers*

Adrien Belsola (Institut Fresnel Aix Marseille Univ, CNRS, Centrale Med, France); François Bordas (Aix-Marseille Université, France); Pierre Sabouroux (Institut Fresnel, France); Victoria Tishkova (Aix Marseille Univ, Interdisciplinary Center of Nanoscience, France)

104 Setpoint-to-Sample Temperature Offset in a 7 mm Coaxial Cell for Dielectric Characterization *Special Session Papers*

François Bordas (Aix-Marseille Université, France); Adrien Belsola (Institut Fresnel Aix Marseille Univ, CNRS, Centrale Med, France); Pierre Sabouroux (Institut Fresnel, France)

160 Laser-Etched Silicone-Based Metamaterial Absorber for Conformal Stealth and RCS Reduction *Special Session Papers*

Gwenael Danielou (Université de Rennes, France & French-German Research Institute of Saint-Louis, France); Oussama Lamrini (Université de Rennes France, France); Hanadi Breiss (IETR, France); Pouliguen Philippe (DGA, France); Lucile Amory (Agence Innovation Défense, France); Ronan Adam (French-German Research Institute of Saint-Louis, France); Ala Shariha (Université de Rennes & IETR, France); Loic Bernard (ISL & IETR, France); Ratiba Benzerga (IETR - Université de Rennes 1, France)

105 Towards Dielectric-Assisted Patch Antenna Optimization for RF Energy Harvesting *Special Session Papers*

Clotilde Liguaud (Université de la Reunion, Reunion); Adrien Belsola (Institut Fresnel Aix Marseille Univ, CNRS, Centrale Med, France); Pierre-Olivier Lucas de Peslouan (Université de la Réunion, Reunion); Alexandre Douyère (University of La Reunion, France); Frédéric Zolla (Aix Marseille Université, France); Pierre Sabouroux (Institut Fresnel, France)

Wednesday, October 21 14:00 - 15:00

1p1-C: SPS15 Antenna Systems and Architectures

Room: Orchid

Chair: Raffaele Solimene (Università degli studi della Campania Luigi Vanvitelli, Italy)

63 Antenna Hardware Considerations for High-Accuracy UWB AoA Localization *Special Session Papers*

Max James Ammann (Technological University Dublin, Ireland); Hossein Raghbi Hokmabadi (TUDublin AHFR, Ireland)

97 Integrating Field Amplitude and Spatial Information Flows: A New Paradigm for 6G MIMO Coverage Planning *Special Session Papers*

Marco Donald Migliore (University of Cassino, Italy)

214 Fast Symmetry-Aware Greedy Sampling for Planar near-Field Measurements *Special Session Papers*

Mario Del Prete (University of Campania Luigi Vanvitelli, Italy); Antonio Cuccaro (University of Campania, Italy); Angela Dell'Aversano (Università degli Studi della Campania L. Vanvitelli, Italy); Maria Antonia Maisto (Università degli studi della Campania Luigi Vanvitelli, Italy)

Wednesday, October 21 14:00 - 15:20

1p1-D: E01 Modeling, Simulations, and Predictions of Measurements in Realistic Environments

Room: Plumeria

Chair: Junichi Naganawa (Electronic Navigation Research Institute, Japan)

15 A Fundamental Study of Automotive Radar Training Data Generation in a Cooperative Simulation Environment

Tetsuya Takamatsu, Masato Watanabe, Shogo Morita, Kensuke Taguchi, Ejirou Shibusawa and Kouji Arata (Kyocera Corporation, Japan)

59 Experimental Characterization of RIS-Assisted Indoor mmWave Propagation

Iswarya Muralidharan (SASTRA Deemed University, India); Ramya Vijay (SASTRA University, India); Filomin Joseena Viyakulasamy (SASTRA Deemed University, India)

71 Influence of Ground Plane Grounding Methods on the Automotive Radiated Susceptibility Test

Martin Gabrišák, Jakub Krchnák and Valerija Hodolič (Slovak University of Technology in Bratislava, Slovakia); Jozef Hallon (Slovak University of Technology in Bratislava (STU), Slovakia); Mikuláš Bittera (Slovak University of Technology in Bratislava, Slovakia); Jan Halgos (Slovak University of Technology in Bratislava (STU), Slovakia)

73 Developing Advanced Simulation Models for Ferrite Core Materials Used in Antenna Applications

Valerija Hodolič, Jakub Krchnák, Martin Gabrišák and Anatolii Kliuchka (Slovak University of Technology in Bratislava, Slovakia); Elo Usak (STU in Bratislava, Slovakia); Jan Halgos (Slovak University of Technology in Bratislava (STU), Slovakia)

Wednesday, October 21 15:00 - 15:40

1p1-C': SPS08 - Antenna and sensor for agricultural applications

Room: Orchid

Chair: Hiroshi Murata (Mie University, Japan)

57 Radiation Pattern Characterization of Phased Array Antenna for Tea Leaf Maturity Detection via Direction-of-Arrival Estimation *Special Session Papers*

Yohanes Galih Adhiyoga (National Research and Innovation Agency (BRIN), Indonesia); Arie Pangesti Aji and Randy Rahmanto (Universitas Dian Nusantara, Indonesia); Indra Riyanto (Universitas Budi Luhur, Indonesia); Adhi Mahendra (University of Pancasila, Indonesia & Universitas Indonesia, Indonesia); Catur Apriono (Universitas Indonesia, Indonesia); Suisbiyanto Prasetya (The National Research and Innovation Agency, Indonesia); Ken Paramayudha (National Research and Innovation Agency, Indonesia & Mie University, Japan); Ashif Aminulloh Fathnan (National Research and Innovation Agency (BRIN), Indonesia & Telkom University, Indonesia)

174 Design and Implementation of a Metasurface-Based Wireless Sensor for in-Situ Moisture Monitoring During Tea Withering *Special Session Papers*

Arie Setiawan (National Research and Innovation Agency, Indonesia); Suisbiyanto Prasetya (The National Research and Innovation Agency, Indonesia); Fajri Darwis (National Research and Innovation Agency (BRIN), Indonesia); Riyani Jana Yanti (National Research and Innovation Agency, Indonesia); Yohanes Galih Adhiyoga (National Research and Innovation Agency (BRIN), Indonesia); Taufiqurrachman (University of Technology Malaysia & National Research and Innovation Agency - BRIN, Indonesia); Yudi Maulana (Indonesian Institute of Sciences (LIPI), Indonesia); Arief Budi Santiko (Research Center for Telecommunication - National Research and Innovation Agency (BRIN), Indonesia); Deni Permana Kurniadi (LIPI, Indonesia); Sulistyarningsih (BRIN, Indonesia); Ashif Aminulloh Fathnan (National Research and Innovation Agency (BRIN), Indonesia & Telkom University, Indonesia)

Wednesday, October 21 15:40 - 16:00

Wednesday, October 21 16:00 - 17:40

1p2-A: SPS06 - UAV Applications

Room: Rose

Chair: Robert Geise (HTWK University of Applied Science Leipzig, Germany & Technische Universität Braunschweig, Germany)

29 UAV near-Field Measurements of NavAid Antenna Arrays - ILS Localizer Results of Project NAVANT *Special Session Papers*

Robert Geise (HTWK University of Applied Science Leipzig, Germany & Technische Universität Braunschweig, Germany); Altan Akar (TU Braunschweig, Germany); Björn Neubauer (Technische Universität Braunschweig, Germany); Rüdiger Strauß (Aerobox UG, Germany); Torsten Fritzel (Aerobox GmbH, Germany)

209 Measurement- and Simulation-Based Advances in Unmanned Mobile Image Transmission Systems for UAVs *Special Session Papers*

Shoichi Kitazawa and Erina Sasaki (Muroran Institute of Technology, Japan)

45 Basic Study on Planar Array Antennas Directivity Control for Disaster Recovery Networks by UAV

Yuji Komatsuya, Masanori Nomachi and Shinya Aichi (SoftBank Corp., Japan)

46 Feasibility Study on High-Altitude Passive Modulation Classification of Ground Uplink Signals

Masanori Nomachi, Kazumasa Ikawa and Shinya Aichi (SoftBank Corp., Japan)

213 Development and Experimental Evaluation of a 24 GHz Bistatic Radar Using Software-Defined Radio

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

Wednesday, October 21 16:00 - 17:20

1p2-C: A04 A07 A10 A11 Advanced Antenna Arrays and Beamforming, MIMO radars

Room: Orchid

Chair: Yoshiki Sugimoto (Nagoya Institute of Technology, Japan)

17 *Beam Pattern Synthesis for 300-GHz Lens Antenna Driven by Multiple Simultaneous Primary Feeds*

Prabir Garu, Soma Saito, Ryu Shimamura, Yoshiki Sugimoto, Yuji Tanaka and Kunio Sakakibara (Nagoya Institute of Technology, Japan)

72 *Design of a Scaled Antenna System for Large Terrestrial Antenna System Diagnostics*

Jakub Krchnák, Michal Dzuríš, Martin Gabrišák and Valerija Hodolič (Slovak University of Technology in Bratislava, Slovakia); Jan Halgos (Slovak University of Technology in Bratislava (STU), Slovakia); Michal Štibraný (Slovak University of Technology in Bratislava, Slovakia)

68 *Design for Grating Lobe Suppression of Multibeam Phased Lens Array in 300 GHz Band*

Ryu Shimamura, Yoshiki Sugimoto, Kunio Sakakibara, Yuji Tanaka and Nobuyoshi Kikuma (Nagoya Institute of Technology, Japan)

217 *Leveraging Steering Diversity to Mitigate Truncation Errors in Planar near-Field Phased Array Diagnostics*

Mario Del Prete (University of Campania Luigi Vanvitelli, Italy); Maria Antonia Maisto (Università degli studi della Campania Luigi Vanvitelli, Italy)

1p2-D: A06 Antenna Systems and Architectures

Room: Plumeria

Chairs: Hartuti Mistialustina (Universitas Sangga Buana, Indonesia), Hiroshi Murata (Mie University, Japan)

120 *Implementation and Evaluation of a 3GPP NTN IoT Node over GEO Satellites*

Galci Jostin Basso-Bibila (Universite Cote d'Azur, LEAT, France); Manh-Thao Nguyen (University of Information Technology, Vietnam); Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France)

197 *Radiation Characteristics Measurement of Beam Steerable Linear Array Fed by Strip-Bridge Butler Matrix*

Agus D. Prasetyo (Telkom University, Indonesia & Institut Teknologi Bandung, Indonesia); Zulfi (Telkom University, Indonesia); Muhammad Daud (Universitas Malikussaleh, Indonesia); Fakhruddin Ahmad Nasution (Institut Teknologi Bandung, Indonesia); Muhammad Manzil Karama (Bandung Institute of Technology, Indonesia); Achmad Munir (Institut Teknologi Bandung, Indonesia)

199 *Design and Implementation of Recycled HDPE-Based Fractal Koch Island Antenna*

Fakhruddin Ahmad Nasution (Institut Teknologi Bandung, Indonesia); Hartuti Mistialustina (Universitas Sangga Buana, Indonesia); Novelita Rahayu (Institut Teknologi Bandung, Indonesia); Suprayogi (Telkom University, Indonesia); Chairunnisa and Achmad Munir (Institut Teknologi Bandung, Indonesia)

225 *Mioty vs. LoRa: A Comparative Signal Propagation and Reliability Study for Smart Building Applications*

Manh-Thao Nguyen (University of Information Technology, Vietnam); Thai Khang Tran, Tien Duc Nguyen and Hoang Em Ly (University of Information and Technology, Vietnam); Le Huy Trinh (University of Information and Technology & Vietnam National University, Vietnam); Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France)

Wednesday, October 21 16:00 - 16:20

1pbd: Coffee Break

Room: Cattleya

Wednesday, October 21 16:20 - 17:40

1p2-B: M06 Microwave, Millimeter-Wave, and THz Imaging Systems

Room: Cattleya

Chair: Ic-Pyo Hong (Kongju National University, Korea (South))

21 *Correlation-Driven Antenna Arrangement Evaluation in a 3×3 Multistatic Microwave Imaging System*

Dalila Misman (Universiti Teknologi MARA, Malaysia); Mohamad Zoinol Abidin Bin Abd Aziz (Universiti Teknikal Malaysia Melaka & Hang Tuah Jaya, Malaysia); Nurul Huda Abd Rahman (Universiti Teknologi MARA, Malaysia)

106 *Analysis of Rebar Corrosion Characteristics Using near-Field Millimeter-Wave SAR Imaging*

Hyeon-Seok Oh and Ic-Pyo Hong (Kongju National University, Korea (South))

126 *Clutter Reduction in Millimeter-Wave Images via Singular Value Decomposition and Wavelet Transform*

Calin Ion Maraloiu and Francesca Vipiana (Politecnico di Torino, Italy); Jorge Alberto Tobon Vasquez and Marco Ricci (Wavision srl, Italy); Claire Migliaccio (Université Côte d'Azur, France); Laurent Brochier (Université de Nice-Sophia Antipolis, France)

205 *Urban Observation Using QZSS-Based Synthetic Aperture Radar*

Hiroto Debun, Ryo Natsuaki and Akira Hirose (The University of Tokyo, Japan)

Wednesday, October 21 18:00 - 20:00

Thursday, October 22

Thursday, October 22 9:00 - 9:40

2a1-A: SPS13 - Precise Microwave, Mm-wave and THz Measurement and Calibration

Room: Rose

Chair: Yuya Tojima (National Institute of Advanced Industrial Science and Technology, Japan)

161 *Recent Developments in High-Frequency Power Standards at NMIJ* *Special Session Papers*

Yuya Tojima, Moto Kinoshita and Shoji Yuto (National Institute of Advanced Industrial Science and Technology, Japan)

204 *3D-Printed Absorber for Free Space Terahertz Power Sensor* *Special Session Papers*

Genki Kuwano (National Institute of Advanced Industrial Science and Technology, Japan); Ryohei Hokari, Kazuma Tsujioka, Mano Ando and Kazuma Kurihara (National Institute of Advanced Industrial Science and Technology (AIST), Japan); Yuya Tojima, Shoji Yuto and Moto Kinoshita (National Institute of Advanced Industrial Science and Technology, Japan)

Thursday, October 22 9:00 - 10:40

2a1-B: A12 E05 RFID, Sensors & Systems

Room: Cattleya
Chair: Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France)

- 49** *Antenna Architectures for Microwave Excitation of NV-Diamond Quantum Sensors: Near-Field and Far-Field Approaches*
Hanna Rashidzadeh, Rashid Rashidzadeh and Majid Ahmadi (University of Windsor, Canada)
- 6** *A Bidirectional Mid-Range Magnetic Induction Wireless Communication System for Extreme Underground Environments*
Jang-Yeol Kim (ETRI, Korea (South)); Hyun Joon Lee (Electronics and Telecommunications Research Institute, Korea (South)); JungHoon Oh (ETRI, Korea (South)); Kye-Seok Yoon (Electronics and Telecommunications Research Institute, Korea (South)); In-Kui Cho (ETRI, Korea (South))
- 140** *Ultra-Low Power Communication Platform for Internet of Plants Application*
Dorian Diana (Université Côte d'azur & LEAT, France); Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France)
- 148** *On-Metal RFID Tags: Measurements & Simulations*
Yassine Waldane (Université Côte d'Azur, France); Robert Staraj (University Cote d'Azur, CNRS, LEAT, France); Aliou Diallo (Université Côte d'Azur- LEAT-CNRS, France); Philippe Le Thuc (Université Côte d'Azur, CNRS, LEAT, France)
- 170** *Waveform Statistics as a Design Parameter for RF-DC Rectifier Optimization*
Amine Mahdi Hamidouche (Telecom Paris, France); Kyriaki Niotaki (LTCI & Télécom Paris, France); Reda Mohellebi (LTCI, IP Paris, France); Chadi Jabbour (Telecom Paris, France)

Thursday, October 22 9:00 - 10:20

2a1-C: A19 A17 A16 Antennas for Vehicles, Power transfer, and Medicine/ Medical Applications

Room: Orchid
Chair: Akiko Kohmura (Electronic Navigation Research Institute, Japan)

- 118** *Toyota-Logo-Shaped Antenna for Mobility Wireless Communication Systems*
Dinh Thanh Le and Hiroshi Yoshimoto (Toyota Motor Corporation, Japan)
- 47** *Design of a 5G High-Band Implantable Antenna for High-Speed Neural Data Transmission*
Zagarsuren Batbaatar and Yesun-Erdene Khurelsukh (Mongolian University of Science and Technology, Mongolia); Oyun-Erdene Bolormaa (Mongolian University of Science and Technology, Ulaanbaatar, Mongolia); Purevtseren Bayarsaikhan and Uuganbayar Purevdorj (Mongolian University of Science and Technology, Mongolia); Bayar-Erdene Lkhagvasuren (Mongolian University of Science and Technology, Ulaanbaatar, Mongolia)
- 169** *Microwave Radiometry for Detecting Deep Tissue Thermal Anomalies Beyond Infrared Thermography*
Neenu Vymeliyath Sajeew and Kavitha Arunachalam (Indian Institute of Technology Madras, India)
- 48** *Distributed Antenna Arrays at 28 GHz: Taylor-Tapered Architecture for 5G/6G IoT Power*
Rashid Rashidzadeh, Abtin Sadri and Majid Ahmadi (University of Windsor, Canada)

Thursday, October 22 9:00 - 10:40

2a1-D: M09 M10 Antenna Testbeds Radar & RCS

Room: Plumeria
Chair: Kazuyuki Morioka (National Institute of Information and Communications Technology, Japan)

- 44** *Integrated Communication-and-Sensing Payload Architecture for UAV-Based Wireless Relay Systems*
Kazumasa Ikawa, Masanori Nomachi and Yuji Komatsuya (SoftBank Corp., Japan)
- 60** *On the Feasibility of near-Field to Far-Field Correction in Fixed Bistatic Configuration*
Juan-Carlos Castelli and Sophie Langlet (ONERA, France)
- 83** *Finite Reflector Aperture Effects on Target Size Limitation in Compact Range RCS Measurements*
Rui Feng, Gaoyan Hao and Sai Chen (Beihang University, China)
- 99** *Formulation of Scattered-Field Transformation for Fixed Bistatic Angle with a Wavevector Equivalence Approximation*
Yoshihiko Akamine (Japan Ministry of Defense, Japan)
- 201** *Calibration of RCS Measurement System Using Inverse Super Resolution Fourier Transformation*
Naruto Yonemoto (Electronic Navigation Research Institute & National Institute of Maritime, Port and Aviation Technology, Japan); Akiko Kohmura, Shunichi Futatsumori, Kazuyuki Morioka, Masahiko Sato and Junichi Honda (Electronic Navigation Research Institute, Japan)

2a1-H: SPS09 - Microwave/Millimeter-wave imaging and applications

Room: Magnolia Hall
Chairs: Hiroshi Murata (Mie University, Japan), Arie Setiawan (National Research and Innovation Agency, Indonesia)

- 30** *270 GHz Electric Field Imaging Using an Electro-Optic System Based on a Polarization Image Sensor* *Special Session Papers*
Ryoma Okada and Chihaya Ohara (Nara Institute of Science and Technology, Japan); Maya Mizuno (National Institute of Information and Communications Technology, Japan); Kiyotaka Sasagawa (Nara Institute of Science and Technology, Japan)
- 54** *Non-Line-of-Sight Target Detection Using Polarimetric Radar Imaging in Urban Environments* *Special Session Papers*
Dion Hayu Fandiantoro (Kumamoto University, Japan & Institut Teknologi Sepuluh Nopember, Indonesia); Ryuji Kuse and Takeshi Fukusako (Kumamoto University, Japan)
- 122** *Microwave Signal Reflection Measurement for FRPM Pipe Inspection* *Special Session Papers*
Yuri Kasai (Mie University, Japan); Tadahiro Okuda and Ryuichi Togase (Kurimoto LTD, Japan); Yui Otagaki and Hiroshi Murata (Mie University, Japan)
- 158** *EM Analysis of Reflection Characteristics from Periodically Grooved Runway Surfaces* *Special Session Papers*
Nobuhiko Shibagaki (Kokusai Denki Electric Inc., Japan)
- 211** *Detection Location Accuracy Evaluation of the 90 GHz Millimeter-Wave Airport Surface Movement Radar* *Special Session Papers*
Shunichi Futatsumori, Daigo Suzuki and Noriaki Hiraga (Electronic Navigation Research Institute, Japan); Yosuke Sato and Nobuhiko Shibagaki (Kokusai Denki Electric Inc., Japan); Kenichi Kashima (KOKUSAI DENKI Electric Inc., Japan)

Thursday, October 22 10:40 - 11:00

Thursday, October 22 11:00 - 12:00

2a2: Keynote Speech 2

Room: Magnolia Hall

Chair: Hiroshi Murata (Mie University, Japan)

Thursday, October 22 12:00 - 13:00

Thursday, October 22 13:00 - 14:20

2p1-A: SPS18-(1) - Electromagnetic Signal and Information Theory (ESIT) for Next-Generation Wireless Systems

Room: Rose

Chair: Marco Donald Migliore (University of Cassino, Italy)

108 *ESIT-AI: Electromagnetic Signal Information Theory Meets Artificial Intelligence* Special Session Papers

Marco Donald Migliore (University of Cassino, Italy)

116 *A CNN-CFAR Technique for Antenna Array Diagnostics* Special Session Papers

Maryam Iftikhar, Alessandro Fedeli and Andrea Randazzo (University of Genoa, Italy)

75 *Proposal of Physical Layer Key Generation Based on Communication-Channel Polarization Entropy* Special Session Papers

Yoshihito Fujimoto, Ryo Natsuaki and Akira Hirose (The University of Tokyo, Japan)

196 *Physical Layer Secure Wireless Communication Using Orthogonal Dual Polarization Hopping* Special Session Papers

Takashi Taniguchi, Ryo Natsuaki and Akira Hirose (The University of Tokyo, Japan)

2p1-B: SPS10 - Antenna Metrology, and Precision Antenna Measurement (NMI Session)

Room: Cattleya

Chairs: Masanori Ishii (National Institute of Advanced Industrial Science and Technology & National Metrology Institute of Japan, Japan), Yuanfeng She (National Institute of Advanced Industrial Science and Technology, Japan)

119 *Practical Accuracy Assessment of Single-Antenna Gain Measurement Using a Finite Metallic Reflector Up to 40 GHz* Special Session Papers

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

159 *Transforming near-Field Measurement into Accurate Far-Field Radiation Patterns for Log Periodic Antenna* Special Session Papers

Sarinya Pasakawee (National Institute of Metrology Thailand, Thailand); Vitawat Sittakul, Muthita Somabutr and Pichanad Intaravichien (KMUTNB, Thailand)

175 *Performance Evaluation of EMC Noise Separation Algorithm Using Measured S-Parameters* Special Session Papers

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

238 *AC Magnetic Field Standard and AC Magnetometer Calibrations at NMJ* Special Session Papers

Masanori Ishii (National Institute of Advanced Industrial Science and Technology & National Metrology Institute of Japan, Japan)

2p1-C: M03 Antenna Metrology, Precision Antenna Measurements

Room: Orchid

Chair: Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology & 7G aa Corporation, Japan)

53 *Surface Characterization of a Microfabricated Reflectarray for Terahertz Links*

Aarbj Mundaganur (State University of New York at Buffalo, USA); Natalya Tokranova (University at Albany, USA); Xuanyu Zhou (University at Buffalo, USA); Luca Maddison (University at Buffalo, USA); Shahabj Mundaganur, Dylan Tua, Onoruoiza David Shaibu and Jung-Hun Seo (University at Buffalo, USA); Priyangshu Sen (SUNY Polytechnic Institute, USA); Nathaniel Cady (University at Albany, USA); Jonathan Bird (The State University of New York, USA); Arjun Singh (SUNY Polytechnic Institute, USA)

123 *Antenna in System: Impulse Response Recovery*

Esteban Geenons (LEAT - Université Côte d'Azur, France); Claire Migliaccio and Nicolas Fortino (Université Côte d'Azur, France); Christian Waldschmidt (University of Ulm, Germany)

229 *Shared-Aperture Array Antenna with Sequential Phase Feeding for Polarizer Characterization*

Dwi Andi Nurmantris and Trasma Yunita (Telkom University, Indonesia); Ridanto Eko Poetro (Institut Teknologi Bandung, Indonesia); Nana Sutisna (Bandung Institute of Technology, Indonesia); Mohammad Ridwan Effendi and Achmad Munir (Institut Teknologi Bandung, Indonesia)

223 *Effect of Finite Reflection Magnitude on the Accuracy of Kása's Circle-Fitting Algorithm in Sliding-Match Calibration*

Laszlo Banyasz (Budapest University of Technology and Economics & Robert Bosch Ltd., Hungary); Lajos Nagy (Budapest University of Technology and Economics, Hungary)

2p1-D: E02 E04 Radar, Sensing AI

Room: Plumeria

Chair: Atsushi Kanno (Nagoya Institute of Technology, Japan)

50 *Monopulse-like Angle-of-Arrival Estimation for ADS-B Signal of Advanced Air Mobility Aircraft*

Junichi Naganawa and Tadashi Koga (Electronic Navigation Research Institute, Japan); Ryota Mori (Kobe University, Japan)

114 *Spatial Source Consensus for Contactless Heart-Rate Estimation with a 77-GHz MIMO FMCW Radar*

Keivan Alirezazad (Universität der Bundeswehr München, Germany)

137 *Development of a CFAR Assisted Back Projection Method for MIMO Through-Wall Imaging*

Suman Anand (IIT ROORKEE, India); Mandar Kisan Bivalkar (K. J. Somaiya Institute of Engineering and Information Technology, India); Dharmendra Singh (Indian Institute of Technology Roorkee, India)

200 *Distributed Millimeter-Wave Multi-Static Imaging Toward UAV Detection*

Atsushi Kanno, Lijia Liu and Kunihiro Sasaki (Nagoya Institute of Technology, Japan); Kenichi Kashima (KOKUSAI DENKI Electric Inc., Japan); Shunichi Futatsumori (Electronic Navigation Research Institute, Japan); Tetsuya Kawanishi (Waseda University, Japan & National Institute of Information and Communications Technology, Japan); Bo Kum Jung (Waseda University, Japan)

Thursday, October 22 14:40 - 15:00

Thursday, October 22 15:00 - 15:40

2p2-A: SPS18-(2) - Electromagnetic Signal and Information Theory (ESIT) for Next-Generation Wireless Systems

Room: Rose

Chair: Marco Donald Migliore (University of Cassino, Italy)

219 *Effective Bandwidth and Sinc Interpolation for Electromagnetic Field Sampling Along Observation Curves* Special Session Papers

Raffaele Solimene (Università degli studi della Campania Luigi Vanvitelli, Italy); Mario Del Prete (University of Campania Luigi Vanvitelli, Italy); Maria Antonia Maisto (Università degli studi della Campania Luigi Vanvitelli, Italy); Angela Dell'Aversano (Università degli Studi della Campania L. Vanvitelli, Italy); Antonio Cuccaro (University of Campania, Italy)

172 *High-Resolution Human Body Imaging Using a 32x32 Massive MIMO Radar* Special Session Papers

Naoki Honma, Sotaro Yoshioka and Kentaro Murata (Iwate University, Japan)

Thursday, October 22 15:00 - 16:40

2p2-B: M05 M07 MMW/THz/Quasi-optical Antenna Measurement

Room: Cattleya

Chair: Michitaka Ameya (AIST, Japan)

9 *Identifying Wafer Probe Effects in Sub-THz over-the-Air Measurements of Antennas-on-Chip*

Jordi Cornelis Franciscus Zandboer, Gabriele Federico, Ulf Johannsen and A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands)

52 *Characterization of Custom-Built J-Band Reflectarray in Non-Line-of-Sight Links*

Aarbaaj Mundaganur (State University of New York at Buffalo, USA); Natalya Tokranova (University at Albany, USA); Pin Chi Liang (SUNY Polytechnic Institute, USA); Dana Cavanagh (SUNY Polytechnic Institute, USA); Priyanshu Sen (SUNY Polytechnic Institute, USA); Nathaniel Cady (University at Albany, USA); Jonathan Bird (The State University of New York, USA); Arjun Singh (SUNY Polytechnic Institute, USA)

80 *Measurement-Based Determination of RIS Reflection Coefficients for Beamforming*

Florian Kiss, Tobias Kancz, Robert Langwieser and Christoph F Mecklenbräuker (TU Wien, Austria)

167 *Single-Shot Blockage Localization in near-Field THz Systems: A Case Study*

Dana Cavanagh (SUNY Polytechnic Institute, USA); Priyanshu Sen and Arjun Singh (SUNY Polytechnic Institute, USA)

228 *EVM Evaluation by Very Fast Spherical near-Field Measurement System Using FPGA-Based Receivers at 3-20 GHz*

Soon-Soo Oh (Chosun University, Korea (South))

Thursday, October 22 15:00 - 16:20

2p2-C: E06 E08 Metamaterial & Quasi-optical

Room: Orchid

Chair: Hiroshi Murata (Mie University, Japan)

33 *Highly Efficient Quasi-Optical Converter for 230 GHz Gyrotron with Non-Gaussian Intermediate Wave Beam*

Anton Gashturi (Institute of Applied Physics of Russian Academy of Sciences, Russia); Gregory Denisov (Institute of Applied Physics RAS, Russia)

190 *A Broadband Folded Trapezoidal Metasurface for Gain Enhancement of Sub-THz Antennas*

Abhay Dwivedi (IIT Roorkee, India); Priyansha Kaurav and Nagendra P Pathak (Indian Institute of Technology Roorkee, India)

206 *Development of Rectangular Waveguide Filter Using Recycled High Density Polyethylene*

Hartuti Mistialustina (Universitas Sangga Buana, Indonesia); Novelita Rahayu (Institut Teknologi Bandung, Indonesia); Budi Syihabuddin (Telkom University, Indonesia); Sulistyaningsih (BRIN, Indonesia); Junas Haidi and Achmad Munir (Institut Teknologi Bandung, Indonesia)

215 *Performance Characteristics of Magneto-Dielectric Material-Loaded Waveguide BPF Under External Magnetic Bias*

Achmad Munir and Junas Haidi (Institut Teknologi Bandung, Indonesia); Dwi Andi Nurmantris (Telkom University, Indonesia); Rheyuniarto Sahlendar Asthan (Institut Teknologi Sumatera, Indonesia & Institut Teknologi Bandung, Indonesia)

Thursday, October 22 15:00 - 15:40

2p2-D: E10 M01 M02 Antenna & EM measurement

Room: Plumeria

Chair: Robert Geise (HTWK University of Applied Science Leipzig, Germany & Technische Universität Braunschweig, Germany)

39 *Initial Field Trial of a Next-Generation L-Band Digital Aeronautical Communications System*

Kazuyuki Morioka, Masahiko Sato, Junichi Naganawa, Daigo Suzuki, Shunichi Futatsumori and Akiko Kohmura (Electronic Navigation Research Institute, Japan)

58 *GCPW-to-Air-Filled SIW Transition Using Mushroom-Type EBG Structure in mm-Wave Band*

Azuki Iwamoto (Nagoya Institute of Technology, Japan); Arash Arsanjani (Graz University of Technology, Austria); Hiroaki Takahashi (AT&S AG, Austria); Yoshiki Sugimoto (Nagoya Institute of Technology, Japan); Michael Gadringer (Graz University of Technology, Austria); Kunio Sakakibara (Nagoya Institute of Technology, Japan)

Thursday, October 22 15:40 - 16:40

2p2-A': SPS19-(1) - Measurements, Modeling, and Wave Propagation in Complex Indoor Environments for Next-Generation Wireless Systems

Room: Rose

Chairs: Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France), Francis Keshmiri (Huawei Technologies France, France)

5 *Enhancing IB-ISAC in Full-Duplex Systems Using Massive MIMO for Future 6G Applications*

Jamal Zaid (303 Terry Fox Drive, Canada & R&D, Huawei technologies, Canada); James Griffiths (Huawei Technologies Canada Ltd, Canada); James Zhang (Huawei Technologies Canada Ltd, Canada, Canada); Mobeen Mahmood (Huawei Technologies Canada, Canada)

24 *ReLoRa: Wi-Fi Interference-Resilient LoRa Communication via Bin Masking*

Chenglong Shao (Kyushu Institute of Technology, Japan); Tongyang Xu (University College London, United Kingdom (Great Britain)); Qinghe Du (Xi'an Jiaotong University, China); Ali Hassan Sodhro (Kristianstad University, Sweden)

66 *Hybrid OTA Measurement and Deterministic Channel Modeling for Indoor Coverage* Special Session Papers

Lydia Kebli (Sorbonne University, France); Francis Keshmiri (Huawei Technologies France, France); Huang Rongfang (Huawei Technologies, China); Yun yaw Chu (Huawei, France); Xuming Wu and Yan Zeng (Huawei Technologies, China); Eric Wang (Huawei Technologies Co., Ltd., China)

Thursday, October 22 16:40 - 17:00

Thursday, October 22 17:00 - 18:40

2p3-A: SPS19-(2) - Measurements, Modeling, and Wave Propagation in Complex Indoor Environments for Next-Generation Wireless Systems

Room: Rose

Chairs: Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France), Francis Keshmiri (Huawei Technologies France, France)

- 95** *RF Phasor near-Field Measurement and Equivalent Source Modeling of Wi-Fi Router Antennas* Special Session Papers
Rudy Bagheriasl (Art-fi, France); Stephane Pannetrat (ART-Fi, France); Lydia Kebli (Sorbonne University, France); Francis Keshmiri (Huawei Technologies France, France)
- 110** *A Phaseless Radiation Pattern Measurement Applied to Antenna with Unknown Polarisation* Special Session Papers
Francois Gallée (IMT Atlantique, France); Myssipsa Mehrasz (IMT Atlantique & LabSticc Laboratory, France)
- 192** *On the Correlation Between Antenna Patterns and Throughput Spatial Consistency in Wireless Links* Special Session Papers
Walid El Hajj, Bastien Peres, Hilman Bin Rokman and Nawfal Asrih (Intel Corporation - Wireless Certification Center, France); Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France); Wissam Hleiss (LEAT - Université Côte d'Azur, France); Robert Staraj (University Cote d'Azur, CNRS, LEAT, France)
- 141** *Small Antenna Measurement Using Optical-Fiber Feeding and a Tightly Coupled Antenna Array* Special Session Papers
Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France)
- 156** *Measurement and Optimization of a Multi-Beam Lens Antenna in L-Band* Special Session Papers
Ngoc Tu Dang (Université Cote d'Azur, France); Lionel Tombakdjian (Université Côte d'Azur, France); Fabien Ferrero (Université Cote d'Azur, CNRS, LEAT & CREMANT, France)

2p3-B: SPS22 - Photonic Signal Processing for Mobile Networks

Room: Cattleya

Chairs: Tsuyoshi Konishi (Waseda University, Japan), Shoichiro Oda (National Institute of Information and Communications Technology, Japan)

- 41** *Adaptive Optics for Optical Ground Stations Using a High-Density MEMS Mirror Toward Tbps-Class Satellite Feeder Links in 6G Networks* Special Session Papers
Yuki Ashida (SCREEN Holdings Co., Ltd., Japan); Ono Yoshito and Oya Shin (National Astronomical Observatory of Japan, Japan); Yoshihiko Saito and Hiroyuki Tsuji (National Institute of Information and Communications Technology, Japan); Masahiko Kokubo (SCREEN Holdings Co., Ltd., Japan)
- 128** *Nonlinear Compensation Based on Optical Phase Conjugation in LEO Satellite Networks* Special Session Papers
Kota Kurome (The University of Osaka, Japan); Shoichiro Oda and Satoshi Shinada (National Institute of Information and Communications Technology, Japan); Ken Mishina (The University of Osaka, Japan)
- 129** *BER Evaluation of Self-Referenced QPSK Coherent Detection in Inter-Satellite Communications* Special Session Papers
Hinato Ono (University of Waseda, Japan); Anthony Brasi (National Institute of Information and Communications Technology, Japan); Kyogo Kiso (Waseda University, Japan); Shoichiro Oda (National Institute of Information and Communications Technology, Japan); Hideaki Furukawa (NICT, Japan); Tsuyoshi Konishi (Waseda University, Japan)
- 182** *Wireless DQPSK Signal Detection Using Antenna-Integrated Optical Phase Modulator and Silica Fiber* Special Session Papers
Hiroshi Murata, Taichi Endoh and Mitsuki Masamoto (Mie University, Japan)
- 184** *Demonstration of Controllable Sub-THz Signal Generation Using High-Frequency Migration Technology* Special Session Papers
Ryosuke Mizuno (University of Waseda, Japan); Daigo Arai (Waseda University, Japan); Koichiro Ohkushi (Waseda University, Japan); Hiroshi Murata (Mie University, Japan); Tsuyoshi Konishi (Waseda University, Japan)

2p3-C: M02 Electromagnetic Measurement Methods and Techniques

Room: Orchid

Chair: Shunichi Futatsumori (Electronic Navigation Research Institute, Japan)

- 92** *Dielectric Characterization of Blood and Plasma for Non-Invasive Microwave Sensing of Physiological Parameters*
Victoria Tishkova (Aix Marseille Univ, Interdisciplinary Center of Nanoscience, France); Adrien Belsola (Institut Fresnel Aix Marseille Univ, CNRS, Centrale Med, France); Clement Buisson (Institut Fresnel, CINA, Dassault Aviation, France); Lourdes Mounien (C2VN Centre de Recherche en CardioVasculaire et Nutrition, France); Flavie Sicard and Jean-François Landrier (Aix-Marseille Univ, C2VN, INRAE, INSERM, France); Erwan Selingue and François Geffroy (NeuroSpin, CEA-Saclay, France); Pierre Sabouroux (Institut Fresnel, France)
- 101** *Real-Time Feedback of Microwave Ablation Using a Commercial Antenna*
Thais Barbosa Caetano Souza (Federal University of Uberlândia, Brazil & Aix-Marseille Université, France); Victoria Tishkova (Aix Marseille Univ, Interdisciplinary Center of Nanoscience, France); Pierre Sabouroux (Institut Fresnel, France)
- 32** *Improved Printed SIW Resonator Compensation Technique for Material Characterization*
Paola Andrea Escobari Vargas, Ad Reniers and A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands); Tanja Braun and Friedrich Mueller (Fraunhofer IZM, Germany); Ulf Johannsen and Elmine Meyer (Eindhoven University of Technology, The Netherlands)
- 103** *Ground Reflection Measurement and Electrical Parameter Estimation of Airport Asphalt in the 4.3 GHz Band*
Kohsuke Ushimaru, Takashi Hikage and Manabu Omiya (Hokkaido University, Japan); Kazuyuki Morioka and Shunichi Futatsumori (Electronic Navigation Research Institute, Japan)
- 235** *Determination and Comparison of the Quality Factor Q of a Large Automotive Reverberation Chamber Across Stirred and Tuned Operating Modes in Time and Frequency Domain*
Bilal Bares and Johannes Hippeli (BMW AG, Germany); Holger Hirsch (University of Duisburg-Essen, Germany)

Thursday, October 22 17:00 - 18:20

2p3-D: M04 M13 M14 M15 Dosimetry, Satellite, etc.

Room: Plumeria

Chair: Takashi Hikage (Hokkaido University, Japan)

- 74** *Biometric Analysis of the Power Absorption Level in the Femur at Frequencies at 1.8 Ghz to 4 Ghz*
Erick Fabricio Orozco Valdiviezo (Escuela Superior Politécnica de Chimborazo, Ecuador & APS Member, Ecuador); Erika F Yambay (Escuela Superior Politécnica de Chimborazo, Ecuador)
- 22** *Active Learning Method for Antenna Design, Measurements, and Uncertainty Analysis*
Lieke AM Geubbels, Mirte Verdaasdonk, Justin Geerarts, Paola Andrea Escobari Vargas, A. B. (Bart) Smolders, Elmine Meyer and Ad Reniers (Eindhoven University of Technology, The Netherlands)
- 208** *Distance Dependence of Incident and Absorbed Power Density for a 7-GHz Lens-Antenna Exposure System*
Shota Suzuki and Takashi Hikage (Hokkaido University, Japan); Hiroshi Masuda (Kurume University School of Medicine, Japan); Kun Li (The University of Electro-Communications, Japan); Akiko Nagai (Aichi Gakuin University, Japan)
- 230** *Open-Air Scattering and Diffraction Measurements of Human-Induced Channel Perturbations*
Kashan Mohammed Sha Alidjan (Eindhoven University of Technology, The Netherlands); Jean-Paul Linnartz (Technische Universiteit Eindhoven, The Netherlands); Hans-Jürgen Hartmann (Lab, The Netherlands); Ramiro Serra (Eindhoven University of Technology, The Netherlands)

Thursday, October 22 19:00 - 22:00

Friday, October 23

Friday, October 23 9:00 - 10:20

3a1-A: SPS14 - Antenna Measurement and Application from IEICE Technical Committee on Antenna Measurements and Testing

Room: Rose

Chairs: Michitaka Ameya (AIST, Japan), Takuichi Hirano (Tokyo City University, Japan)

78 *Evaluation of the Improved S-Parameter Method with n-Port Feeding* Special Session Papers

Koichiro Yokoyama and Toru Fukasawa (Kanazawa Institute of Technology, Japan)

183 *Gain of Antenna in a Lossy Media* Special Session Papers

Takuichi Hirano (Tokyo City University, Japan)

233 *Vehicle Integrated Antenna Performance Prediction Using an Antenna Digital Twin* Special Session Papers

Elfie Tan Yan Tong (Rohde & Schwarz, Germany); Winfried Simon, Aline Friedrich, Andreas Lauer and Thorsten Liebig (IMST GmbH, Germany); David Schaefer (IMST & Antennas & EM Modelling, Germany)

237 *Hamming-Distance-Constrained QUBO Optimization for Phase-Quantized Array Synthesis* Special Session Papers

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

3a1-B: SPS21 - Joint Special Session with IEEE iWEM 2026

Room: Cattleya

Chair: Takuji Arima (Tokyo University of Agriculture and Technology, Japan)

94 *Design of a Travelling-Wave Excited Planar Array Antenna on the Broad Wall of a Rectangular Waveguide for 45° Inclined Linear Polarization* Special Session Papers

Yuichi Kimura (Saitama University, Japan)

98 *Successive Estimation for the Element-Fields in Phased Arrays with Cyclic Time-Variations* Special Session Papers

Toru Takahashi (Mitsubishi Electric Corporation, Japan)

127 *FDTD Analysis of Oceanic Surveillance FMCW Radar Including Realistic Sea Wave* Special Session Papers

Takuji Arima (Tokyo University of Agriculture and Technology, Japan); Naoki Honma (Iwate University, Japan)

180 *Prototyping of a Thin Metamaterial-Based Electromagnetic Scattering Sheet for 300-GHz Band* Special Session Papers

Yasutaka Murakami (The University of Electro-Communications); Jerdvisanop Chakaroathai and Katsumi Fujii (National Institute of Information and Communications Technology, Japan)

3a1-C: A04 Wideband and UWB Antennas

Room: Orchid

Chair: Achmad Munir (Institut Teknologi Bandung, Indonesia)

64 *A 2-20 GHz UWB Antipodal Vivaldi Antenna*

Samak Jahangir and Chung-Tse Michael Wu (National Taiwan University, Taiwan)

67 *A Compact Two-State Beam-Steering Antenna Architecture for Sector-Selective UWB Door Access*

Christoph Hermann, Azra Velic and Walther Pachler (Infineon Technologies AG, Austria); Erich Leitgeb (Graz University of Technology, Austria); Harald Witschnig (Infineon Technologies AG, Austria)

207 *Experimental Verification of Bandwidth Performance of CPW-Fed Spline-Based Compact Monopole Antenna*

Zulfi (Telkom University, Indonesia); Agus D. Prasetyo (Telkom University, Indonesia & Institut Teknologi Bandung, Indonesia); Bambang Setia Nugroho (Telkom University, Indonesia); Achmad Munir (Institut Teknologi Bandung, Indonesia)

27 *End-Cut Square Patch Antenna for Microwave Imaging-Based Breast Tumor Detection*

Sunit Fulari D (Chandigarh University, India); Harbinder Singh (Chandigarh University, Gharuan, India); Simrandeep Singh (Chandigarh University, India & IIT Ropar, India); Om Prakash Kumar (Manipal Academy of Higher Education, India); Shweta Vincent (Manipal Institute of Technology Manipal Academy of Higher Education, India)

3a1-H: SPS20 - AI-Enabled Antennas and RF Sensing Systems for Smart Applications

Room: Magnolia Hall

Chairs: Thuy Minh Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam), Kien Nguyen (Chiba University, Japan)

135 *A Simple 1-Bit Reflectarray Antenna for 6-GHz Beam-Switching Applications* Special Session Papers

Thien Minh Nguyen, Lac Tan and Duong Nguyen (International University, Vietnam); Linh Mai (University of Engineering and Technology, VNU-Hanoi & UET, Vietnam)

149 *Compact 2-Bit RIS Unit Cell for Adaptive Connectivity and Smart RF Sensing* Special Session Papers

Long Nguyen (University of Engineering and Technology & Vietnam National University, Vietnam); Vu Thi Lan Nhi (University of Engineering Technology - VNU, Vietnam); Thien Minh Nguyen (International University, Vietnam); Tuan Anh Mai (VNU University of Engineering and Technology, Vietnam); Linh Mai (University of Engineering and Technology, VNU-Hanoi & UET, Vietnam); Duong Nguyen (International University, Vietnam)

220 *A 5.8 GHz High-Gain Dual-Beam Antenna Array with an Integrated Hadamard Beamforming Network* Special Session Papers

Quang Chinh Chu (Hanoi University of Science and Technology (HUST), Vietnam); Long Nguyen, Tuan Ly Hoang Dinh and Quoc Cuong Nguyen (Hanoi University of Science and Technology, Vietnam); Kien Nguyen (Chiba University, Japan); Thuy Minh Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam)

224 *In-Situ RTToF Ranging with the LR2021 LoRa Transceiver: Frequency-Plan and Antenna Effects in an Urban Environment* Special Session Papers

Manh-Thao Nguyen (University of Information Technology, Vietnam); Thanh Long Vo (University of Information and Technology, Vietnam); Le Huy Trinh (University of Information and Technology & Vietnam National University, Vietnam); Fabien Ferrero (Université Côte d'Azur, CNRS, LEAT & CREMANT, France)

Friday, October 23 10:20 - 10:40

Friday, October 23 10:40 - 12:40

3a2-A: SPS03 - Electromagnetic Inverse Scattering and Imaging: Theory and Applications

Room: Rose

Chair: Raffaele Solimene (Università degli studi della Campania Luigi Vanvitelli, Italy)

- 202 Calibration of FMCW Radar Array with Range-Dependent Effects** *Special Session Papers*
Marisa Sperandeo and Federica Cardinale Ciccotti (University of Campania Luigi Vanvitelli, Italy); Maria Antonia Maisto and Raffaele Solimene (Università degli studi della Campania Luigi Vanvitelli, Italy); Luigi Zeni (University of Campania Luigi Vanvitelli, Italy); Claudio Papa (CORISTA, Italy)
- 166 Structural Diagnostics Through Neural-Network Processing and Mild Data Driven Inversion** *Special Session Papers*
Antonio Cuccaro (Università Della Calabria, Italy); Alessandro Fedeli (University of Genoa, Italy); Romolo Marcelli (Institute for Microelectronics and Microsystems National Research Council of Ita, Italy); Mohammad Omki (University of Genoa, Italy); Cristina Ponti (Roma Tre University, Italy); Emanuela Proietti (Institute for Microelectronics and Microsystems National Research Council of Italy, Italy); Andrea Randazzo (University of Genoa, Italy); Giuseppe Schettini (Roma Tre University, Italy); Raffaele Solimene (Università degli studi della Campania Luigi Vanvitelli, Italy)
- 178 Microwave Imaging Applied to the Inspection of Masonry Structures** *Special Session Papers*
Antonio Cuccaro (University of Campania, Italy); Roberto Dima (University of Campania Luigi Vanvitelli, Italy); Alessandro Fedeli (University of Genoa, Italy); Romolo Marcelli (Institute for Microelectronics and Microsystems National Research Council of Ita, Italy); Mohammad Omki (University of Genoa, Italy); Cristina Ponti (Roma Tre University, Italy); Emanuela Proietti (Institute for Microelectronics and Microsystems National Research Council of Italy, Italy)
- 189 A Computationally Light 3D-MUSIC Algorithm Solving Velocity Ambiguity for High-Resolution Automotive Radar Imaging** *Special Session Papers*
Federica Cardinale Ciccotti and Marisa Sperandeo (University of Campania Luigi Vanvitelli, Italy); Maria Antonia Maisto and Raffaele Solimene (Università degli studi della Campania Luigi Vanvitelli, Italy); Luigi Zeni (University of Campania Luigi Vanvitelli, Italy); Claudio Papa (CORISTA, Italy)
- 20 Regularized Inverse MoM for Broadband near-Field Pattern Synthesis for UWB GPR Applications** *Special Session Papers*
Ananya Dey and Amitabha Bhattacharya (IIT Kharagpur, India)
- 26 Incoherent Multi-View Radar Imaging of Breathing Human Subjects** *Special Session Papers*
Takuya Sakamoto and Masaya Kato (Kyoto University, Japan)

Friday, October 23 10:40 - 12:00
3a2-B: A13 A14 A15 MMW, THz, Next-G Antenna

Room: Cattleya
Chair: Akiko Kohmura (Electronic Navigation Research Institute, Japan)

- 28 Compact Dual-Band Four-Port MIMO Antenna Employing Orthogonal Element Arrangement for Millimeter-Wave 5G Systems**
Shweta Vincent (Manipal Institute of Technology Manipal Academy of Higher Education, India); Rajesh Kumar D (Vel Tech R&D Institute, Chennai, India); Om Prakash Kumar (Manipal Academy of Higher Education, India)
- 56 Compact Dual-Resonant U-Slotted Patch Antenna Integrated with Dumbbell-Shaped DGS for Bandwidth Enhancement in 5 GHz WLAN Applications**
Hasniza Hambali (Universiti Kebangsaan Malaysia (UKM), Malaysia); Mandeep Singh (UKM, Malaysia); Mohammad Tariqu Islam (Universiti Kebangsaan Malaysia, Malaysia); Ibrahim Tahir (Science and Technology Research Institute for Defence (STRIDE), Malaysia)
- 76 Low-Cost High-Gain 3D-Printed COC Lens Antennas for Terahertz Applications**
Daiki Ichikawa (The University of Osaka, Japan); Weijie Gao, Nguyen Hoai Ngo and Masayuki Fujita (Osaka University, Japan)
- 185 High-Directivity 77 GHz Stacked Waveguide Leaky-Wave Antenna for 4D Imaging Radars**
Farouk Bouazza (Université Côte d'Azur, France); Jean-Yves Dauvignac (Université Côte d'Azur, CNRS, LEAT, France); Jérôme Lanteri (Université Côte d'Azur, France); Nadir Fouad Bedjiah (Conexivity Group, Switzerland); Eddy Jehamy (Simulia, Dassault Systèmes, France)

Friday, October 23 10:40 - 12:20
3a2-C: M11 M12 Absorbers & UAV Drone

Room: Orchid
Chair: Shoichi Kitazawa (Muroran Institute of Technology, Japan)

- 35 Inter-Robot Communication for Small Pipeline Inspection Robots Using Microwave Guided-Modes Propagating Along PVC Pipe-Wall**
Kyo Tanaka, Takuju Matsumoto and Masato Mizukami (Muroran Institute of Technology, Japan); Hiroshi Murata (Mie University, Japan); Akihiko Hirata (Chiba Institute of Technology, Japan)
- 85 Broadband Dielectric Characterization of High-Loss Flexible Thin-Film Composites for X-Band Jaumann Absorber Design**
Anthony Augé (Université de Bretagne Occidentale, France); Vincent Laur (Lab-STICC / University of Brest, France); Philippe Coquet (CINTRA UMI 3288 CNRS/NTU/THALES, Singapore); Alexis Chevalier (University of Brest & Lab-STICC UMR CNRS 3192, France); Julien Deza (Thales LAS France SAS, France); Ian Tan (Thales Singapore, France)
- 142 A Metasurface Electromagnetic Wave Absorber Featuring Selective Absorption in 5.3 GHz Wi-Fi Bands**
Hiroyuki Nomoto (Sekisui Chemical Co., Ltd., Japan)
- 157 Polarization-Insensitive Triple Band Rectifying Metasurface for RF Energy Harvesting**
Prashant Shah (Indian Institute of Technology Mandi, India); Shrikanth Reddy (IIT Palakkad, India); Hiroki Wakatsuchi (Nitech, Japan)
- 186 Experimental Characterization of Air-to-Ground Propagation for a 2.4 GHz Unmanned Mobile Image Transmission System**
Erina Sasaki and Shoichi Kitazawa (Muroran Institute of Technology, Japan)

Friday, October 23 10:40 - 12:40
3a2-H: SPS04 - Millimeter-Wave and Sub-THz Antennas and Measurement Techniques

Room: Magnolia Hall
Chair: Kunio Sakakibara (Nagoya Institute of Technology, Japan)

- 3 Experimental Demonstration of a 60 GHz Antenna-in-Package Module for Multi-Gigabit Short-Range Wireless Communication** *Special Session Papers*
Won Min Choi, Myeong Jun Oh and Keum Cheol Hwang (Sungkyunkwan University, Korea (South))
- 4 Measurement and Analysis of Glass Transmission Characteristics in mmWave and Sub-THz Bands** *Special Session Papers*
Masaki Takanashi (Toyota Central R&D labs. Inc., Japan); Toshiaki Watanabe (Toyota Central R&D Labs., Inc., Japan); Katsushi Sanda (Toyota Central Research and Development Laboratories, Incorporated, Japan); Keizo Inagaki (National Institute of Information and Communications Technology, Japan & Waseda University, Japan); Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Issei Watanabe (National Institute of Information and Communications Technology, Japan); Norihiko Sekine (National Institute for Information and Communications Technology, Japan); Akifumi Kasamatsu (National Institute of Information and Communications Technology, Japan)
- 155 Design and Focal-Spot Characterization of a 300-GHz Cassegrain Spot-Focusing Antenna** *Special Session Papers*
Naoki Okada and Shintaro Hisatake (Gifu University, Japan)
- 8 Design of Dual-Polarized Cross-Feeding SIW Endfire Phased Array Antenna in 300 GHz Band** *Special Session Papers*
Amgalan Namuun, Yoshiki Sugimoto and Kunio Sakakibara (Nagoya Institute of Technology, Japan); Yoshihiro Kanasaki (Panasonic System Networks R&D Lab. Co. Ltd., Japan); Yuji Tanaka (Nagoya Institute of Technology, Japan)

- 40

High-Density Integrated Antenna Array Module for Sub-THz Sensor Application

Special Session Papers

Hikaru Watanabe, Nagahiro Abe, Ichiro Somada and Keiko Shirafuji (Mitsubishi Electric Corporation, Japan); Akinori Taira (Mitsubishi Electric Corp., Japan); Kengo Nishimoto (Mitsubishi Electric Corporation, Japan)
- 145

Reflection and Transmission-Ripple Reduction of W-Band Dielectric Cuboid Probes Using a Porous anti-Reflection Structure

Special Session Papers

Ryota Asai and Shintaro Hisatake (Gifu University, Japan)

Friday, October 23 12:40 - 13:40

Friday, October 23 13:40 - 15:00

3p1-A: SPS23 - Compact Antennas: Challenges, Innovations, and Recent Applications.

Room: Rose
Chairs: Christophe Delaveaud (CEA-LETI, France), Ala Sharaiha (Université de Rennes & IETR, France)

- 143

Compact Beam-Tilted Yagi-Uda Antenna with Enhanced Beam Steering Using Inductive Parasitic Striplines

Special Session Papers

Raneem Jaafar (Université de Rennes, France); Sylvain Collardey (University of Rennes 1, France); Ala Sharaiha (Université de Rennes & IETR, France)
- 147

Radiation Efficiency Enhancement of Electrically Small Antennas

Special Session Papers

Abdellah Touhami (CEA-LETI, France); Marwan Jadid (CEA-Leti, France); Christophe Delaveaud (CEA-LETI, France)
- 90

Comparative Performance Analysis of PIN Diodes for Dual-Band Frequency-Reconfigurable Antennas Operating in Sub-6 GHz and mmWave Bands

Ayesha Iqbal, Muhammad Ali Imran and Masood Ur-Rehman (University of Glasgow, United Kingdom (Great Britain))
- 146

A Circularly Polarized Printed Monopole Antenna for Radar Application in UWB High Band

Special Session Papers

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

Friday, October 23 13:40 - 15:20

3p1-B: SPS07 - Antenna-Integrated Photonic Devices and Applications

Room: Cattleya
Chairs: Taro Arakawa (Yokohama National University, Japan), Hiroshi Murata (Mie University, Japan)

- 111

Antenna-Coupled Electrode Electro-Optic Modulator Based on Mesa-Structured LiNbO3 Crystal and Fluororesin Substrate

Special Session Papers

Riku Sugano, Ichiro Kuwayama and Suguru Yamagishi (Sumitomo Electric Industries, Ltd., Japan); Hiroshi Murata (Mie University, Japan)
- 165

Frequency-Tunable Metasurface ELC Resonator for Reconfigurable Electro-Optic Modulators via Dielectric Loading

Special Session Papers

Rizadi Sasmita Darwis (Mie University, Japan & Politeknik Caltex Riau, Indonesia); Yui Otagaki and Hiroshi Murata (Mie University, Japan)
- 187

Design of Antenna-Integrated Silicon Optical Modulator for 60-GHz Millimeter-Wave Band

Special Session Papers

Kengo Yoshida and Taro Arakawa (Yokohama National University, Japan)
- 195

Proposal of Metamaterial-Antenna-Integrated Quantum-Well Optical Modulator for 100-GHz Millimeter-Wave Band

Special Session Papers

Kento Kawahara (Yokohama National University, Japan); Hiroshi Murata (Mie University, Japan); Taro Arakawa (Yokohama National University, Japan)
- 203

Multi-Static Imaging Experiment Using FMCW Radar and Antenna-Integrated EO Modulator

Special Session Papers

Daiki Kaneko and Masayoshi Cho (Mie University, Japan); Naruto Yonemoto (Electronic Navigation Research Institute & National Institute of Maritime, Port and Aviation Technology, Japan); Hiroshi Murata (Mie University, Japan)

Friday, October 23 13:40 - 15:00

3p1-H: SPS11 - Standardization Activities in IEC TC103

Room: Magnolia Hall
Chairs: Michitaka Ameya (AIST, Japan), Atsushi Kanno (Nagoya Institute of Technology, Japan)

- 115

UTC-PD-Integrated HEMT Photonic Double-Mixer for Fiber-Wireless-Convergence Networks

Special Session Papers

Akira Satou and Tsung-Tse Lin (Tohoku University, Japan); Taiichi Otsuji (Center Excellence ENSEMBLE3, Poland)
- 117

Electro-Optic Terahertz Antenna near-Field Measurement: IEC TC103 Standardization and Recent Progress

Special Session Papers

Shintaro Hisatake (Gifu University, Japan)
- 132

Introduction to Low Phase-Noise Optoelectronic Oscillator Technologies for Millimetre-Wave and Terahertz Radiocommunications

Special Session Papers

Atsushi Kanno (Nagoya Institute of Technology, Japan)
- 221

System Performance of Optically Connected Multilateration at an Airport

Special Session Papers

Yasuyuki Kakubari and Satoru Inoue (Electronic Navigation Research Institute, MPAT, Japan); Tadashi Koga (Electronic Navigation Research Institute, Japan)

Friday, October 23 15:20 - 15:50

3p2: Closing Ceremony

Room: Magnolia Hall