Invite Special Session and Invite Session

Nov. 29 (Tue)　16:15-17:45 (JST)

Invite 1		Room Ibuka
I1-1	The switching system of WPT and communication for B5G/6G	Naoki Hasegawa (SoftBank Corp.)
I1-2	Future life in 2030s realized by Beyond 5G	Kentaro Ishizu (NICT)
I1-3	Utilization of space communications for evolving 6G system	Eiji Okamoto (Nagoya Institute of Technology)

Invite 2		Room 1
I2-1	Real-time MIMO transmission experiments using FPGA based MIMO DSP	Shohei Beppu (KDDI Research)
I2-2	Future Challenges for EMC Research in Telecommunication Service aimed Innovative Sustainable Society in 2040	Kimihiro Tajima (NTT Advanced Technology Corporation)
I2-3	Optical network nodes for high mode count multi-mode fiber networks	Ruben S. Luis (NICT)

Nov. 30 (Wed)　9:00-10:45 (JST)

Special 1　9:00-10:30		Room Ibuka
IS1-1	Sophomore Created VHF Wireless Power Exciter for Medium Wave AM Radio Broadcasting Receiver	Yuri Kitagawa and Takashi Ohira (Toyohashi University of Technology)
IS1-2 (Online)	Modern Channel Coding for Synchronization Errors	Ryo Shibata (Tokyo University of Science)
IS1-3	Miniaturization and Test Results of Shinkansen Antenna for Overhead Line Voltage Detection and Wireless Communication	Yoshihiro Matsumura, Takeshi Nishiyama, Eishi Sasaki (Central Japan Railway Company), Kengo Nishimoto, Hiroyuki Akutsu (Mitsubishi Electric Corporation), Yukitoshi Sanada (Keio University)

Invite 3		Room 1
I3-1 (Online)	Antennas Measurement for Beyond 5G and 6G Wireless Applications using Radio over Fiber Technologies.	Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology (AIST))
I3-2 (Online)	LED lighting considering circadian rhythm by melanopic illuminance control	Akane Aoki, Saeko Oshiba (Kyoto Institute of Technology)
I3-3	Digital Native Infrastructure Implementation based on Internet-by-Design	Hiroshi Esaki (The University of Tokyo)
I3-4	Wireless communication and its problems in healthcare / hospitals in Japan	Eisuke Hanada (Saga University)

Nov. 30 (Wed)　14:00-15:45 (JST)

Invite 4		Room Ibuka
I4-1	Distillation-based Serverless Federated Learning over Sensor Networks	Akihito Taya (the University of Tokyo)
I4-2	Distributed acoustic sensing using frequency division multiplexing technique for deployed optical fiber networks	Hiroshi Takahashi (NTT Corporation)
I4-3	Probabilistic Digital-Twin	Hideyuki Shimonihi (Osaka University)
I4-4	Weakly coupled 3-mode 4-core fiber with standard cladding diameter	Yuto Sagae (NTT Access Network Service Systems Laboratories)

Invite 5		Room 1
I5-1 (Online)	Recycling Smartphone based sensor Networks for Civil Infrastructures Monitoring	Arturo Buscarino (University of Catania)
I5-2 (Online)	Study of Disaster-Resilient Network-Cloud Ecosystem with Open Disaggregation and Cooperation Technologies (Invited)	Sugang Xu (National Institute of Information and Communications Technology (NICT))
I5-3	Quantum Optimization	Prabhas Chongstitvatana (Chulalongkorn University)
I5-4	Role of Terahertz Semiconductor Devices for Applications	Kyung Hyun Park (Future & Basic Technology Research Division, ETRI)

Dec. 1 (Thu)　9:00-10:30 (JST)

Special 2		Room Ibuka
IS2-1	Resource allocation models for efficient and fault-tolerant software-defined networks	Takehiro Sato (Kyoto University), Seiki Kotachi (Kyoto University), Ryoichi Shinkuma (Shibaura Institute of Technology), Eiji Oki (Kyoto University)
IS2-2	5G NR features Realizing Ultra-Reliable and Low Latency Communication	Tetsuya Yamamoto (Panasonic Holdings Corporation)
S2-3	Beyond 5G Network Architecture and its state-of-the-art Research for Access Network	Naoaki Yamanaka (Keio University)

Special 3		Room 1
IS3-1	Improved monitoring of Flex Ethernet over OTN links	Takafumi Tanaka (NTT)
IS3-2 (Online)	Field Trial of Dynamic Mode Switching for 5G New Radio Sidelink Communications towards Application to Truck Platooning	Manabu Mikami, Kohei Moto, Koichi Serizawa, and Hitoshi Yoshino (Softbank)
IS3-3	Wireless Access Technology Based on Factor Analysis of Communication Quality Using Redundant Information	Koji Yamamoto (Kyoto University), Takayuki Nishio (Kyoto University), Akihito Taya (Kyoto University), Mai Ohta (Fukuoka University), Makoto Taromaru (Fukuoka University), Kazuto Yano (ATR), Babatunde Ojetunde (ATR), and Keiichiro Mori (ATR)

Oral Session and Short Presentation Session

Nov. 29 (Tue)　9:15-10:45

Oral 1 Wireless Communications	Room Ibuka
O1-1 Development of extreme coverage communication system extended by non-terrestrial network: End-to-end route management scheme based on QoS of user equipment	Munehiro Matsui (NTT corporation), Hisayoshi Kano (NTT corporation), Junichi Abe (NTT corporation), Yuki Hokazono (NTT DOCOMO, Inc.), Atsushi Minokuchi (NTT DOCOMO, Inc.), Yoshihisa Kishiyama (NTT DOCOMO, Inc.), Fumihiro Yamashita (NTT corporation)
O1-2 Non-Repudiation Broadcast Authentication Methods for C-V2X Communication	Takaaki Kasai (Tokyo Denki University), Takeshi Ogawa (Tokyo Denki University)
O1-3 Performance of Multidimensional TCM-QAM Single-carrier Transmission with Nonlinearity	Hisataka Chonan (Niigata University), Shigenobu Sasaki (Niigata University)
O1-4 Priority message statistics of disaster and crisis management report sent from quasi-zenith satellite Michibiki	Satoshi Takahashi (Hiroshima City University)
O1-5 Detection Probability of PBCH Demodulation Reference Signal Sequence in the Presence of Jamming	Shun Yoneda (Tokyo City University), Mamoru Sawahashi (Tokyo City University), Satoshi Nagata (NTT DOCOMO INC.)

Short 1 Radio Propagation and Various Communications	Room 1
S1-1 Improved Beamforming Design for Full-Duplex Relay-Assisted Cooperative NOMA	Hanlin Liao (Ibaraki University), Teruyuki Miyajima (Ibaraki University)
S1-2 Performance Analysis of Block Beamforming Methods in Two-wave-LOS Multi-User MIMO Communication	Taisei Oe (Nagoya Institute of Technology), Nobuyoshi Kikuma (Nagoya Institute of Technology), Kunio Sakakibara (Nagoya Institute of Technology), Yoshiki Sugimoto (Nagoya Institute of Technology)
S1-3 Performance Degradation due to Crosstalk in Underwater Wireless Optical Communication Systems with a Two-Beam Configuration	Ryoko Yoshino, Keiko Fujii (The Senior High School affiliated with Japan Women's University), Takayuki Yoshino (Tokyo Denki University)
S1-4 Novel Electro-Optic Modulator Using Antenna-Coupled Electrode and MMI coupler for Converting SDM Mobile Wireless Signals to WDM Optical Signals	Mefina Yulias Rofianingrum (Mie University/National Research and Innovation Agency of Indonesia), Yui Otagaki (Mie University), Hiroshi Murata (Mie University)
S1-5 An Result of SNR Difference in Received Antennas in mm-Wave SIMO Radar for A Remote Heart Rate Measurement	Ryota Shigihara (Nihon Univ.), Yaokun Hu (Nihon Univ.), Takeshi Toda (Nihon Univ.)
S1-6 Study of Raytracing using Point Cloud Data for Indoor Area Evaluation	Koshiro Kitao (NTT DOCOMO, INC.), Mitsuki Nakamura (NTT DOCOMO, INC.), Takahiro Tomie (NTT DOCOMO, INC.), Satoshi Suyama (NTT DOCOMO, INC.)
S1-7 Outdoor Experiment Trial of Millimeter-Wave Coverage in 28 GHz and 39 GHz Bands	Kenta Goto (NTT DOCOMO, INC.), Nobuhide Nonaka (NTT DOCOMO, INC.), Takayuki Yamada (NTT DOCOMO, INC.), Satoshi Suyama (NTT DOCOMO, INC.), Shoji Itoh (Ericsson Japan K.K.)

Short 2 Wired Networks	Room 2
S2-1 A Novel Network Configuration Generation Scheme from Network Operator's Intent Described by Natural Language	Masaya Suzuki (Kindai University), Kimihiro Mizutani (Kindai University), Satoru Kobayashi (National Institute of Informatics), Kensuke Fukuda (National Institute of Informatics), Osamu Akashi (National Institute of Informatics)
S2-2 Acquisition Delay Time Evaluation of Cloud-based Load Distribution Model in ICSN	Eishin Nagaoka (Kogakuin University), Ryohei Banno (Kogakuin University), Osamu Mizuno (Kogakuin University)
S2-3 Integrated Quantum Repeater Network System Using Both E2E and HBH Teleportations	Haruna Kimura (University of Fukui), Kazuhisa Matsuzono (NICT), Takaya Miyazawa (NICT), Takuji Tachibana (University of Fukui)
S2-4 Simplified PON with a dedicated bandwidth for upstream traffic for surveillance services	Atsuko Yokotani (Shizuoka University), Hiroshi Mineno (Shizuoka University), Tetsuya Yokotani (Kanazawa Institute of Technology)
S2-5 Performance of Deeply Analyzing Application Switch	Satoshi Ito (Kogakuin University), Akihiro NAKAO (University of Tokyo), Masato OGUCHI (Ochanomizu University), Saneyasu YAMAGUCHI (Kogakuin University)
S2-6 Gateway implementation for evaluating jitter reduction packet forwarding control method	Hikaru Yamaguchi (Keio University), Masaki Murakami (Keio University), Takashi Kurimoto (Keio University), Satoru Okamoto (Keio University), Naoaki Yamanaka (Keio University)
S2-7 Message Delivery Delay with End-to-End Routing in Complex Networks	Yu Hatanaka (Kwansei Gakuin University), Hiroyoshi Sawano (Kwansei Gakuin University), Ryotaro Matsuo (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)

Short 3 Security	Room 3
S3-1 Reconfigurable In-network Security Sensor Network with beyond 5G Emerging Technology (REINS network)	Satoru Okamoto (Keio University), Naoaki Yamanaka (Keio University), Masaki Suzuki (KDDI Research), Atsushi Tagami (KDDI Research), Nobuhito Matsuyama (Alaxala Networks), Takayuki Muranaka (Alaxala Networks)
S3-2 Agent-Based Simulation Approach to Information Dissemination in Social Networking Service: The Impact of Big Five Personality Traits on User Trust	Radifan Fitrach Muhammad (Nara Institute of Science and Technology), Shoji Kasahara (Nara Institute of Science and Technology)
S3-3 A Mathematical Model of Blockchains Considering Dependencies of Fees, Confirmation Latency, and Security	Takumi Hiraide (Nara Institute of Science and Technology), Shoji Kasahara (Nara Institute of Science and Technology)
S3-4 Security Level Management of Physical Servers Based on Optimization Problem for Cost-Effective Service Chain Construction	Daisuke Amaya (University of Fukui), Takuji Tachibana (University of Fukui)
S3-5 Transaction distributed management using self-organization map in DAG-based blockchain NFT	Yoshimi Suematsu (Tokyo Metropolitan University), Takashi Nishitsuji (Tokyo Metropolitan University), Takuya Asaka (Tokyo Metropolitan University)
S3-6 Synthesize Facial Expressions for Authentication Based on Spatiotemporal Information and Actions	Akira Nishihara (Kindai University), Masateru Tsunoda (Kindai University)

Nov. 29 (Tue)　14:00-15:45

Oral 2 Machine Learning and IoT	14:00-15:30 Room Ibuka
O2-1	Reduction methods of the amount of data in blockchain node	Masaki Obayashi (Tokyo Denki University), Takeshi Ogawa (Tokyo Denki University)
O2-2	Sleep/Active operation of optical-power-supplied ONU without electricity for rural IoT	Hiroaki Katsurai (NTT Access Network Service Systems Laboratories), Youichi Fukada (NTT Access Network Service Systems Laboratories), Ryo Miyatake (NTT Access Network Service Systems Laboratories), Haruka Nagoshi (NTT Access Network Service Systems Laboratories), Masayoshi Sekiguchi (NTT Access Network Service Systems Laboratories), Tomoaki Yoshida (NTT Access Network Service Systems Laboratories)
O2-3	Estimation of the ratio of the number of application users in cell by base station data	Yukina Takano (NTT), Kei Takeshita (NTT)
O2-4	LOS/NLOS Classification for Downlink CDL Channel Using Supervised Learning	Jingyu Liu (Keio University), Mondher BOUAZIZI (Keio University), Tomoaki Ohtsuki (Keio University)
O2-5	Gradient Descent Direction Random Walk MIMO Detection using Intermediate Search Point	Naoki Ito (Keio University), Yukitoshi Sanada (Keio University)

Oral 3 Location Estimation	14:00-15:30 Room 1
O3-1	Spatio-temporal model that aggregates information from sensors to estimate and predict states of obstacles for control of moving robots	Yuichi Ohsita (Osaka University), Shinya Yasuda (NEC), Taichi Kumagai (NEC), Hiroshi Yoshida (NEC), Dai Kanetomo (NEC), Masayuki Murata (Osaka University)
O3-2	Machine learning method for location estimation at various altitudes using multiple items of sensed information in indoor environment	Ren Kawamura (Tohoku Institute of Technology), Eisuke Kudoh (Tohoku Institute of Technology)
O3-3	A fingerprint localization using data from different radio environments	Ryoga Ozaki (University of Hyogo), Satoru Aikawa (University of Hyogo), Shin-ichiro Yamamoto (University of Hyogo)
O3-4	CNN Area Estimation using data measured in walking conditions	Shota Nakayama (University of Hyogo), Satoru Aikawa (University of Hyogo), Shinichiro Yamamoto (University of Hyogo)
O3-5	GNSS Spoofing Detection using Multiple Sensing Devices and Decision Tree Classifier	Xin Qi (Waseda University), Toshio Sato (Waseda University), Zheng Wen (Waseda University), Masaru Takeuchi (Japan Datacom Co., Ltd), Yutaka Katsuyama (Waseda University), Kazuhiko Tamesue (Waseda University), Kazue Sako (Waseda University), Jiro Katto (Waseda University), Takuro Sato (Waseda University)

Short 4 Wireless Communications	Room 2
S4-1	Time-Variant Channel Emulation via Spatial Interpolation from 2D Sparsely Sampling of Site-Specific Channel	Nopphon Keerativoranan (Tokyo Institute of Technology), Jun-ichi Takada (Tokyo Institute of Technology)
S4-2	Evaluation of Antenna Beam Search Algorithm Using Terminal Position Prediction in Frequency Sharing	Kizuku Kawamura (Shinshu University), Kohei Akimoto (Akita Prefectural University), Osamu Takyu (Shinshu University)
S4-3	A study of anomaly detection using MCS data in 5G environment	Toshi Ito (Shinshu University), Riku Yamabe (Shinshu University), Osamu Takyu (Shinshu University)
S4-4	System Capacity Analysis of Intelligent Reflecting Surface Considering the Effect of Blockage	Shota Muroki (Waseda University), Shuhei Saito (Waseda University), Fumiaki Maehara (Waseda University)
S4-5	An Initial Code Acquisition Scheme Using Zadoff-Chu Sequences with Positive and Negative Indices	Megumi Fukuma (Mitsubishi Electric Corporation), Akinori Nakajima (Mitsubishi Electric Corporation), Masaki Noda (Mitsubishi Electric Corporation)
S4-6	SINR Improvement by Adaptive Bandwidth Control and Filtering According to Other System Bands in Multi-Band Systems	Shogo Yasuda (Okayama University), Shigeru Tomisato (Okayama University), Kazuhiro Uehara (Okayama University)
S4-7	Blind compensation for IQ imbalance in wideband single-carrier MIMO systems in the presence of a carrier frequency offset	Yuichiro Tamada (Tottori University), Yuta Ueno (Tottori University), Isana Tsubota (Tottori University), Naoto Sasaoka (Tottori University), Tadao Nakagawa (Tottori University)
S4-8	Evaluation of 100 GHz-Band Transmission with Transmitter and Receiver Hybrid Beamforming in Multiuser Environment	Atsuya Nakamura (NTT DOCOMO, INC.), Nobuhide Nonaka (NTT DOCOMO, INC.), Tatsuki Okuyama (NTT DOCOMO, INC.), Satoshi Suyama (NTT DOCOMO, INC.), Takayuki Yamada (NTT DOCOMO, INC.)

Short 5 Theory on Networks	Room 3
S5-1	A Study on the Message Corruption Detectability in AUTOSAR E2E Profile 2	Taichi Emi (Kwansei Gakuin University), Han Nay Aung (Kwansei Gakuin University), Yasuhiro Yamasaki (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)
S5-2	A Study on the Exploration Efficiency of (α, k) Random Walk on Unknown Graphs	Ryo Yoshitsugu (Kwansei Gakuin University), Takeaki Iwata (Kwansei Gakuin University), Ryotaro Matsuo (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)
S5-3	Effect of Laziness of Random Walks on the Efficiency of Graph Exploration in Dynamic Graphs	Daiki Nakagawa (Kwansei Gakuin University), Takeaki Iwata (Kwansei Gakuin University), Ryotaro Matsuo (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)
S5-4	A Study on Node Centrality Obfuscation in Large-Scale Networks	Hiroki Kawamura (Kwansei Gakuin University), Takeaki Iwata (Kwansei Gakuin University), Ryotaro Matsuo (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)
S5-5	A Study on a Co-Ranking Algorithm of Layers and Nodes for Multilayer Networks	Shu Shirakawa (Kwansei Gakuin University), HIroyoshi Sawano (Kwansei Gakuin University), Ryotaro Matsuo (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)
S5-6	An Experimental Study on Modeling Accuracy of Digital Twin for Cloud-Based Remote Vehicle Path Tracking Control	Masaki Minagawa (National Defense Academy of Japan), Yudai Yoshimoto (National Defense Academy of Japan), Ryohei Nakamura (National Defense Academy of Japan), Hisaya Hadama (National Defense Academy of Japan)
S5-7	A Study on the Impact of Network Topology on the Efficiency of Distributed Online Kernel Learning	Kouki Takamori (Kwansei Gakuin University), Taichi Emi (Kwansei Gakuin University), Han Ney Aung (Kwansei Gakuin University), Keita Goto (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)
S5-8	An Implementation of Misconfiguration Prevention System Using Language Model for a Network Automation Tool	Mamoru Kawaguchi (Kindai University), Kimihiro Mizutani (Kindai University), Nobukazu Iguchi (Kindai University)

Nov. 30 (Wed)　11:15-12:45

Oral 4	
Optical Communications	**Room Ibuka**
O4-1	Novel Wavelength-Multiplexed AMCC Insertion and Detection Method with Single Receiver for Protocol-Independent End-to-End User Connections in APN	Takuya Kanai (NTT Access Network Services System Laboratories), Shin Kaneko (NTT Access Network Services System Laboratories), Jun-ichi Kani (NTT Access Network Services System Laboratories), Tomoaki Yoshida (NTT Access Network Services System Laboratories)
O4-2	A Proposal of Satellite-based FSO/QKD System for Multiple Wireless Users	Minh Quang Vu (The University of Aizu), Hoang Doan Le (The University of Aizu), Anh Tuan Pham (The University of Aizu)
O4-3	48 Gbit/s 256 QAM coherently-linked optical and wireless transmission at 61 GHz band using a small planar antenna for 6G	Koichi Shirahata (Tohoku University), Taisei Sato (Tohoku University), Keisuke Kasai (Tohoku University), Toshihiko Hirooka (Tohoku University), Masato Yoshida (Tohoku University), Masataka Nakazawa (Tohoku University)
O4-4	A Study of PDs Arrangement for LED based Underwater Visible Light Communication with Angular Diversity Receiver in shallow water	Keigo Matsunaga (Ibaraki University), Yusuke Kozawa (Ibaraki University), Hiromasa Habuchi (Ibaraki University)
O4-5	A Study on Efficient Coding Methods to Suppress Redundancy and ACK Traffic in LT Codes with Feedback	Maho Ono (OMU), Yosuke Tanigawa (OMU), Yusuke Hirota (NICT), Hideki Tode (OMU)

Short 6	
Advanced Techniques for Antennas and DOA Estimation	**Room 1**
S6-1	Dual band MACKEY Unbalanced Type Inverted F	Kota Hakamata (Kanazawa Institute of Technology), Keito Yokoe (Kanazawa Institute of Technology), Shigeru Makino (Kanazawa Institute of Technology)
S6-2	Study of Circularly-Polarized MACKEY with Two-Point Feed	Michinori Yoneda (Kanazawa Institute of Technology), Keito Yokoe (Kanazawa Institute of Technology), Shigeru Makino (Kanazawa Institute of Technology)
S6-3	Circularly polarized antennas with degenerate separation	Koki Iijima (Kanazawa Institute of Technology), Keito Yokoe (Kanazawa Institute of Technology), Shigeru Makino (Kanazawa Institute of Technology)
S6-4	Measurement results for single-layered reflectarray antenna with Split Rectangular Loop Elements	Masayoshi Takao (Kanazawa Institute of Technology), Yusuke Kaimori (Kanazawa Institute of Technology), Shigeru Makino (Kanazawa Institute of Technology)
S6-5	2-D arraying of 28-GHz MACKEY II	Hajime Suzuki (Kanazawa Institute of Technology), Shigeru Makino (Kanazawa Institute of Technology), Taichi Hamabe (Panasonic Connect Co.)
S6-6	DOA Estimation of Direct Wave in Multipath Environments Using FFT-FOCUSS with Multiple Thinned Arrays	Kazuya Ota (Nagoya Institute of Technology), Nobuyoshi Kikuma (Nagoya Institute of Technology), Kunio Sakakibara (Nagoya Institute of Technology), Yoshiki Sugimoto (Nagoya Institute of Technology)
S6-7	Performance Analysis of Regularized FOCUSS Algorithm in Joint DOD and DOA Estimation Using Bistatic MIMO Radar	Motoya Ichikawa (Nagoya Institute of Technology), Nobuyoshi Kikuma (Nagoya Institute of Technology), Kunio Sakakibara (Nagoya Institute of Technology), Yoshiki Sugimoto (Nagoya Institute of Technology)

Short 7	
IP	**Room 2**
S7-1	Invocation of Expire procedure with Increase in RTT	Natsuki Katsumata (Kogakuin University), Kohei Ogawa (Kogakuin University), Saneyasu Yamaguchi (Kogakuin University)
S7-2	Service Identification from IP Traffic and its Accuracy	Ryo Asaoka (Kogakuin University), Akihiro Nakao (The University of Tokyo), Masato Oguchi (Ochanomizu University), Saneyasu Yamaguchi (Kogakuin University)
S7-3	Restriction of Expire Procedure on Throughput Fluctuation Relief	Kohei Ogawa (Kogakuin University), Natsuki Katsumata (Kogakuin University), Saneyasu Yamaguchi (Kogakuin University)
S7-4	IP Linear Video Delivery System on Dynamic Optical Path Network	Daiki Fukudome (NHK Science & Technology Research Laboratories), Hiroyuki Kitada (NTT Network Service Systems Laboratories), Takafumi Okuyama (NTT Network Service Systems Laboratories), Xiaotian Zhao (NTT Network Service Systems Laboratories), Satoshi Nishimura (NHK Science & Technology Research Laboratories)
S7-5	Investigation of CPU Resource Consumption in Android	Kota Kumakura (Kogakuin University), Takeshi Kamiyama (Nagasaki University), Masato Oguchi (Ochanomizu University), Saneyasu Yamaguchi (Kogakuin University)
S7-6	A Study on HTTP/3 Throughput and CPU Performance	Shintarou Kawai (Kogakuin University), Saneyasu Yamaguchi (Kogakuin University)
S7-7	A Study on the Applicability of TCP Congestion Avoidance Algorithms to Information-Centric Networking	Han Nay Aung (Kwansei Gakuin University), Keita Goto (Kwansei Gakuin University), Hiroyuki OHSAKI (Kwansei Gakuin University)

Short 8	
AI/GA	**Room 3**
S8-1	GA-based Layer Coupling of Power and Transportation Networks for Appropriate Control of Distribution Voltage	Koga Nakamura (University of Fukui), Ryuto Shigenobu (University of Fukui), Takuji Tachibana (University of Fukui)
S8-2	Proposal for Auction Mechanism of Federated Learning with Knowledge Distillation	Yutaka Hatazawa (University of Fukui), Takuji Tachibana (University of Fukui)
S8-3	Supervised Data Construction Method for Clothing Coordination Support System	Marina Ooi (Japan Women's University), Haruhisa Hasegawa (Japan Women's University)
S8-4	English Presentation Evaluation Based on Deep Learning	Yoshihaya Takahashi (Kogakuin University), Takako Kojima (Tokyo Medical University), Takeshi Kamiyama (Nagasaki University), Masato Oguchi (Ochanomizu University), Saneyasu Yamaguchi (Kogakuin University)
S8-5	An Implementation of Effective Server Resource Management Scheme Using Deep Reinforcement Learning	Toshiki Kawakita (Kindai University), Kimihiro Mizutani (Kindai University), Satoru Kobayashi (National Institute of Informatics), Kensuke Fukuda (National Institute of Informatics), Osamu Akashi (National Institute of Informatics)
S8-6	AIMD Window Flow Control using Reinforcement Learning	Kento Otani (Kwansei Gakuin University), Shota Inoue (Kwansei Gakuin University), Keita Goto (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)
S8-7	A Study on the Performance Improvement of a Routing Mechanism using Reinforcement Learning for IoT Networks	Shotaro Takahashi (Kwansei Gakuin University), Shota Inoue (Kwansei Gakuin University), Keita Goto (Kwansei Gakuin University), Hiroyuki Ohsaki (Kwansei Gakuin University)

Dec. 1 (Thu) 14:00-15:45

Oral 5 Analog and Digital Signal Processing for Various Systems	14:00-15:30 Room Ibuka
O5-1 An ESL-cancelling circuit for a film capacitor using vertically stacked coupled square loops	Satoshi Yoneda (Mitsubishi Electric Corporation), Akihito Kobayashi (Mitsubishi Electric Corporation), Norihiko Akashi (Mitsubishi Electric Corporation), Eiji Taniguchi (Mitsubishi Electric Corporation)
O5-2 A Study on the Effect of Water on the Characteristic of Antennas for Water Level Gauges	Koichi Yamaguchi (Okayama University), Shuhei Yamamoto, Ryota Ogata (Okayama University), Shigeru Tomisato (Okayama University), Kazuhiro Uehara (Okayama University)
O5-3 Realization of Multi-Point Coordinated Beamforming Over Millimeter-Wave Channels with Random Blockage	Tomoki Sugiura (Kozo Keikaku Engineering Inc), Tetsuya Iye (Kozo Keikaku Engineering Inc), Shohei Takaya (Kozo Keikaku Engineering Inc), Yuki Susukida (Kozo Keikaku Engineering Inc), Yoshimi Fujii (Kozo Keikaku Engineering Inc), Sota Uchimura (University of Electro-Communications), Koji Ishibashi (University of Electro-Communications)
O5-4 Signal Source Position Estimation in Multipath Environment Using PN Correlation Method with 2D-FOCUSS in UWB Wireless System	Kento Kataoka (Tokai Rika Co., Ltd./Nagoya Institute of Technology), Nobuyoshi Kikuma (Nagoya Institute of Technology), Yoshiki Oishi (Tokai Rika Co., Ltd.), Tatsuya Koike (Tokai Rika Co., Ltd.), Kenichi Koga (Tokai Rika Co., Ltd.), Kunio Sakakibara (Nagoya Institute of Technology), Yoshiki Sugimoto (Nagoya Institute of Technology)
O5-5 Position estimation method using recursive MAP estimation for ultrasonic sensor arrays	Masamichi Hattori (Nagoya University), Asuka Tsujii (Nagoya University/NGK SPARK PLUG CO., LTD), Takashi Kasashima (NGK SPARK PLUG CO., LTD), Hiroyuki Hatano (Mie University), Takaya Yamazato (Nagoya University)

Short 9 Visible Light, Optical Wireless, and UAV	Room 1
S9-1 A Study of Prediction of Operation Information by LSTM Using Electromyography Signals and Operation Information	Yutaka Katsuyama (Waseda University), Toshio Sato (Waseda University), Kazuhiko Tamesue (Waseda University), Takuro Sato (Waseda University), Yuichi Nakamura (Kyoto University), Jiro Katto (Waseda University)
S9-2 Customizable Long-Range UAV Communication System for 4G LTE Networks	Wen-Hsing Kuo (Yuan Ze University), Chia-Chih Kuo (Yuan Ze University)
S9-3 Spectrum Efficiency Improvement by Optimal Modulation Selection in LED Visible Light Wireless Communications by Spatially Parallel Signal Transmission	Sota Hikasa (Okayama University), Shigeru Tomisato (Okayama University), Satoshi Denno (Okayama University), Kazuhiro Uehara (Okayama University)
S9-4 Low-latency Communications in MEC-enabled UAV Systems: A Deep Reinforcement Learning Approach	Giang H.T. Pham (The University of Aizu), Linh T. Hoang (The University of Aizu), Chuyen T. Nguyen (Hanoi University of Science and Technology), Anh T. Pham (The University of Aizu)
S9-5 Influence of Walsh-Hadamard Code Sequency in Visible Light Communication Using an Event Camera	Daiki Ehara (Nagoya University), Zhengqiang Tang (Nagoya University), Masayuki Kinoshita (Chiba Institute of Technology), Takaya Yamazato (Nagoya University), Hiraku Okada (Nagoya University), Koji Kamakura (Chiba Institute of Technology), Shintaro Arai (Okayama University of Science), Tomohiro Yendo (Nagaoka University of Technology), Toshiaki Fujii (Nagoya University)
S9-6 Study on Visible Light Communication System Using Low-Speed Camera and Circular Scanning	Ryosuke Izumi (University of Tsukuba), Tadashi Ebihara (University of Tsukuba), Naoto Wakatsuki (University of Tsukuba), Yuka Maeda (University of Tsukuba), Koichi Mizutani (University of Tsukuba)
S9-7 Smartphone Camera-Based Indoor Positioning System Utilizing Optical Diffusion Filter	Reo Okawara (University of Tsukuba), Tadashi Ebihara (University of Tsukuba), Naoto Wakatsuki (University of Tsukuba), Keiichi Zempo (University of Tsukuba), Koichi Mizutani (University of Tsukuba)
S9-8 Transmission performance improvement using maximum likelihood decision and frequency domain equalization for multi-layer single-carrier optical wireless communications	Hodaka Suzuki (Tottori University), Tadao Nakagawa (Tottori University)

Short 10 Wireless Networks	Room 2
S10-1 Future considerations for the management of hospital LANs	Eisuke Hanada (Saga University), Takato Kudou (Oita University)
S10-2 Research issues on mobile cloud/edge computing for Internet of Vehicles	Jinyeong Um (Dongguk University), Seunghyun Chung (Dongguk University)
S10-3 Development of extreme coverage communication system extended by Non-Terrestrial Network(NTN)-Study of traffic-control method to improve the availability of each user equipment during rainfall-	Hisayoshi Kano (NTT Corporation), Munehiro Matsui (NTT Corporation), Jun-ichi Abe (NTT Corporation), Yuki Hokazono (NTT DOCOMO, INC), HInata Kohara (NTT DOCOMO, INC), Yoshihisa Kishiyama (NTT DOCOMO, INC), Fumihiro Yamashita (NTT Corporation)
S10-4 Challenges of SDN-based VANET	SeungHyun CHUNG (Dongguk University), JinYeong Um (Dongguk University)
S10-5 Handovers using ring network composed of ring node equipment including lower MAC address memory, and top equipment	Hideo Tatsuno
S10-6 A Study on Communication Protocols of Smart Home Devices	Shoichiro Seno (Tokushima Bunri University), Akinori Furuya (Tokushima Bunri University), Hiroyuki Nakayama (Tokushima Bunri University)
S10-7 A Proposal of Communication Time Control Technology for Power Saving of Terminals and Base Stations	Sou Takatani (NTT Access Network Service Systems Laboratories), Toshiro NAKAHIRA (NTT Access Network Service Systems Laboratories), Daisuke MURAYAMA (NTT Access Network Service Systems Laboratories), Takatsune MORIYAMA (NTT Access Network Service Systems Laboratories)

Short 11	
Sensing and Application	**Room 3**
S11-1	A Fuel Cost-less Bus Driver Allocation through Bus IoT Data Analysis	Riku Miura (Kindai University), Kimihiro Mizutani (Kindai University)
S11-2	A Green Platform based on Recycled Smartdevices for Monitoring Buildings	Arturo Buscarino (University of Catania, Italy), Carlo Famoso (University of Catania, Italy), Luigi Fortuna (University of Catania, Italy)
S11-3	An application for Remote Tracking Heart Rate Measurement Using mm-Wave Radar Module with Stepping Motor	Joonyoung Lee (Nihon Univ.), Yaokun Hu (Nihon Univ.), Takeshi Toda (Nihon Univ.)
S11-4	An Effect of Elliptic and Chebyshev II as Bandwidth Limiting Filters in Frequency Selection Method Using Discrete Wavelet Transformation and Machine Learning for Heart Rate Estimation by mm-Wave Radar	Kosuke Otsu (Nihon University), Yaokun Hu (Nihon University), Takeshi Toda (Nihon University)
S11-5	Analyzing Situational Stress Using Multiple Wearable Devices	Taku Yamazaki (Shibaura Institute of Technology), Kotaro Iwama (Shibaura Institute of Technology), Ayumi Takemoto (Shibaura Institute of Technology), Takumi Miyoshi (Shibaura Institute of Technology), Yoshihiro Niitsu (Shibaura Institute of Technology)
S11-6	A Novel Automatic Checkout System without Relearning Additional Item Information	Daisuke Hanamitsu (Kindai University), Kimihiro Mizutani (Kindai University)
S11-7	Designing Synchronization Patterns Based on Euler Graphs for Inaudible Sound Communication Systems	Naofumi Aoki (Hokkaido University), Kosei Ozeki (Hokkaido University), Kenichi Ikeda (Smart Solution Technology, Inc.), Hiroshi Yasuda (Smart Solution Technology, Inc.), Hiroyuki Namba (Smart Solution Technology, Inc.)

Dec. 1 (Thu)　16:15-18:00

Oral 6		16:15-17:45
Network Systems		**Room Ibuka**
O6-1	Network Experiment of the 4 x 10 Gbps Layer 4 Payload "0" Replacement Filter	Satoru Okamoto (Keio University), Masaki Murakami (Keio University), Shinya Nakamura (UBiqube), Yusuke Hirota (NICT), Shin'ichi Akahane (Alaxala Networks), Naoaki Yamanaka (Keio University)
O6-2	Short-term traffic prediction based on mobile control information for proactive optical switching to lower congestion delay	Yuka Okamoto (NTT), Hirotaka Ujikawa (NTT), Yoshihito Sakai (NTT), Tatsuya Shimada (NTT), Tomoaki Yoshida (NTT)
O6-3	A demand-adaptive multi-view video delivery method based on meta-information	Saeko Maeda (Keio University), Takashi Kurimoto (Keio University), Satoru Okamoto (Keio University), Naoaki Yamanaka (Keio University)
O6-4	Experiment on repetitive exchanging of heterogeneous routers for router metabolism	Rei Ishioka (Tokai University), Yuya Suga (Tokai University), Junichi Murayama (Tokai University)
O6-5	Experiment on repetitive router exchanging for router metabolism	Yuya Suga (Tokai University), Rei Ishioka (Tokai University), Junichi Murayama (Tokai University)

Short 12	
High Frequency Devices/Circuits and Sensing	**Room 1**
S12-1	Analysis of Transmission Characteristics of Microstrip Line Loaded with Noise-Suppression Device Arranged Three-Dimensionally	Yihang Cheng (Tokai University), Kimitoshi Murano (Tokai University)
S12-2	Driver's health monitoring with a single MMW sensor	Ryota Kawasaki (University of Kitakyushu), Akihiro Kajiwara (University of Kitakyushu)
S12-3	Digital Predistortion for THz RF Power Amplifier with 16-APSK Modulation in Non-Terrestrial-Networks	San Hlaing Myint (Waseda University), Kazuhiko Tamesue (Waseda University), Kunihisa Jitsuno (Waseda University), Toshio Sato (Waseda University), Takuro Sato (Waseda University), Tetsuya Kawanishi (Waseda University)
S12-4	Study on electromagnetic shielding material for high power equipment with heat dissipation holes	Yuji Sakaguchi (University of Hyogo), Shinichiro Yamamoto (University of Hyogo), Satoru Aikawa (University of Hyogo)
S12-5	Microwave metamaterial EM wave absorber using square metal pattern periodic array structure	Soma Takeda (University of Hyogo), Shinichiro Yamamoto (University of Hyogo), Satoru Aikawa (University of Hyogo), Teruhiro Kasagi (Sanyo-Onoda City University)
S12-6	Design of multilayered high-pass space filter using conductive film grid array sheets and dielectric material	Yuji Taniguchi (University of Hyogo), Shinichiro Yamamoto (University of Hyogo), Satoru Aikawa (University of Hyogo), Shigeki Matsuoka (Zippertubing, Ltd.), Masaki Nagao (Zippertubing, Ltd.)
S12-7	Reflection characteristic evaluation of millimeter wave EM absorber without metal backing	Shinnosuke Kagekawa (University of Hyogo), Shinichiro Yamamoto (University of Hyogo), Kenichi Hatakeyama (University of Hyogo), Morimichi Itoh (Osaka Research Institute of Industrial Science and Technology), Hitoshi Togawa (Keeper Co., Ltd)
S12-8	Deep Learning-based Person Identification using Vital Signs Extracted from Radar Signal	ZELIN XING (Keio University), Mondher Bouazizi (Keio University), Tomoaki Ohtsuki (Keio University)

Short 13	
Optical Communications	**Room 2**
S13-1	Comparison of overfitting characteristics of ANN- and VSTF-based nonlinear equalizers for repeated random bit patterns in optical communication systems	Kai Ikuta (Meiji University), Jinya Nakamura (Meiji University), Daisuke Motai (Meiji University), Moriya Nakamura (Meiji University)
S13-2	Effect of Chromatic Dispersion on Modulator Distortion in Analogue Radio-over-Fiber System Employing Electrical Pre-Distortion	Kosuke Fujishima (Tokyo University of Science), Amila Kariyawasam (Kyushu University), Joji Maeda (Tokyo University of Science)
S13-3	Novel multi-core fiber link embracing its nature of polarity	Takuya Oda (Fujikura Ltd.), Osamu Kikuchi (Fujikura Ltd.), Katsuhiro Takenaga (Fujikura Ltd.), Kentaro Ichii (Fujikura Ltd.)
S13-4	A Probabilistic Shaping Scheme Suitable for Direct-Detection Lightwave System Using Kramers-Kronig Relation	Kansei Daito (Tokyo University of Science), Amila Kariyawasam (Kyushu University), Joji Maeda (Tokyo University of Science)
S13-5	Local-minimum-trapping problem in training of DNN-based nonlinear equalizer for optical communication systems	Jinya Nakamura (Meiji University), Kai Ikuta (Meiji University), Moriya Nakamura (Meiji University)
S13-6	Bundled type fan-in/fan-out device for 4-core multi-core fiber	Kohei Ozaki (Fujikura Ltd.), Yoshifumi Koike (Fujikura Ltd.), Akito Nishimura (Fujikura Ltd.)
S13-7	Improved Radio MIMO Transmission in the Presence of Non-flat Response in Fiber-Wireless Feeder	Tsuyoshi Wakikawa (Nara Institute of Science and Technology), Takeshi Higashino (Nara Institute of Science and Technology), Minoru Okada (Nara Institute of Science and Technology)
S13-8	A proposal on the management interface in BCOM for bandwidth assignment in cooperation between 5G and PON systems	Seiji Kozaki (Mitsubishi Electric Corporation/Shizuoka University), Hiroshi Mineno (Shizuoka University), Takeshi Suehiro (Mitsubishi Electric Corporation), Kenichi Nakura (Mitsubishi Electric Corporation), Satoshi Shirai (Mitsubishi Electric Corporation), Yuki Hatanaka (Kanazawa Institute of Technology), Tetsuya Yokotani (Kanazawa Institute of Technology)

Short 14 Related Overall Technologies		Room 3
S14-1	Secrecy Performance of Molecular Communication with an Absorbing Eavesdropper and D-MoSK Modulation	Zhen Jia (Future University Hakodate, Hakodate), Lisheng Ma (Chuzhou University), Shigen Shen (Shaoxing University), Xiaohong Jiang (Future University Hakodate, Hakodate)
S14-2	Effective transmission and computation technique for electro-holography based on vector quantization of point clouds parallel to the hologram	Yizhi Cheng (Tokyo Metropolitan University), Takashi Nishitsuji (Tokyo Metropolitan University), Takuya Asaka (Tokyo Metropolitan University)
S14-3	Optimal Index Design for Aggregation Accuracy in Packet Level Index Modulation	Ryuji Miyamoto (Shinshu University), Osamu Takyu (Shinshu University), Hiroshi Fujiwara (Shinshu University), Koichi Adachi (The University of Electro-Communications), Mai Ohta (Fukuoka University), Takeo Fujii (The University of Electro-Communications)
S14-4	Highly Efficient Information Collection Method by Trend Analysis of Sensor Information Using Event Position Estimation	Ryuji Miyamoto (Shinshu University), Osamu Takyu (Shinshu University), Hiroshi Fujiwara (Shinshu University), Koichi Adachi (The University of Electro-Communications), Mai Ohta (Fukuoka University), Takeo Fujii (The University of Electro-Communications)
S14-5	Evaluation of Packet Level Index Modulation in 429MHz LoRa/FSK in Actual Equipment	Keita Takeda (Shinshu University), Osamu Takyu (Shinshu University)
S14-6	Interpretability of News Document Classification by BERT	Atsuki Tamekuri (Kogakuin University), Yoshihaya Takahashi (Kogakuin University), Saneyasu Yamaguchi (Kogakuin University)
S14-7	Towards Performance Estimation of NAND SSDs in a Random Read/Write Workload	Daiki Natori (Kogakuin University), Ryousei Takano (National Institute of Advanced Industrial Science and Technology), Takahiro Hirofuchi (National Institute of Advanced Industrial Science and Technology), Saneyasu Yamaguchi (Kogakuin University)
S14-8	Accuracy Improvement in Quick Screen View Rotation with SVM	Koga Toriumi (Kogakuin University), Takeshi Kamiyama (Nagasaki University), Masato Oguchi (Ochanomizu University), Saneyasu Yamaguchi (Kogakuin University)