

WPMC 2025 Preliminary Program

November 10, 2025 (Monday)

Workshop

Workshop WS1: CONASENSE Workshop 2025

Topics

Topic 1: Cognitive, Energy-Efficient IoT-Edge-Cloud Resource Orchestration

Topic 2: Spectrum Sensing and Resource Utilization for Efficient 6G Radio Access

Time: 11:00 – 13:00

Room: Room 3

- **1571188626: Designing for 6G Adoption: A Market-Driven Framework for Trustworthy, Personalization, and Inclusive Next Generation of User Experiences**
Paulo Sergio Rufino Henrique (CTIF Global Capsule Aarhus University & Aarhus University Denmark, France); Roberto Fonseca (Trinca, Spain); Dimitra D. Mitka (Aristotle University of Thessaloniki, Greece); Ramjee Prasad (CITF Global Capsule, Denmark); Per Valter (Østfold University College, Denmark)
- **1571195035: Spatial 3D REM Empowered Spectrum Utilization Monitoring for Smart Factories**
Antoni Ivanov, Vladimir K. Poulkov and Krasimir Tonchev (Technical University of Sofia, Bulgaria); Atanas Georgiev Vlahov (Technical University of Sofia & Research and Development and Innovation Consortium, Bulgaria); Yue Xiao and Ping Yang (University of Electronic Science and Technology of China, China)
- **1571195038: Golden Section for Aerial Base Station Positioning in UAV-assisted Networks**
Antoni Ivanov, Slavcho Valentinov Neshev and Ivaylo Bozhilov (Technical University of Sofia, Bulgaria); Atanas Georgiev Vlahov (Technical University of Sofia & Research and Development and Innovation Consortium, Bulgaria); Radostina Petkova (Technical University of Sofia, Bulgaria); Alben Mihovska (RDIC, Bulgaria); Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece); Stamatia Rizou (Singular Logic, Greece)
- **1571209257: Clutter Loss Modeling for Urban Satellite Links via Calibrated Ray-Tracing Simulations at 1.57 GHz**
Zehan Liu (Beijing Jiaotong University, China & Vienna University of Technology, Austria); Ke Guan, Danping He, Lei Yang and Ting Liu (Beijing Jiaotong University, China); Ying Sun (ZTE Corporation, China); Zhangdui Zhong (Beijing Jiaotong University, China)

Technical Sessions

Technical Session M1: AI-Enabled Wireless Networks

Time: 11:00 – 13:00

Room: Room 1

- **1571196433: Optimizing the performance of Routing Protocol for VANETs in Smart Cities**
Indu Bhardwaj (Galgotias University, India); Sibaram Khara (Sharda University, Greater Noida, India); Tarun Kumar (UPES, Dehradun, India); Usha Chauhan (Galgotias University, India & Sharda University, India); Ajay Bhardwaj (Delhi Technological University, India)
- **1571196465: Lightweight Machine Learning Models for UWB Localization and Gesture Recognition**
Cristian-Alexandru Tănase (University Politehnica of Bucharest, Romania); Anamaria Dumitrescu and Alin Banel Dumitru Trasca (National University of Science and Technology Politehnica Bucharest, Romania); Bogdan Mocanu (Institut Polytechnique de Paris, Télécom SudParis, Laboratoire SAMOVAR, Evry, France)
- **1571196531: Enhancing eCall Systems with LLM-Powered First Aid Guidance and Follow-up Information**
Anamaria Dumitrescu (National University of Science and Technology Politehnica Bucharest, Romania); Cristian-Alexandru Tănase (University Politehnica of Bucharest, Romania); Matias Vaduva (National University of Science and Technology Politehnica Bucharest, Romania); Bogdan Mocanu (Institut Polytechnique de Paris, Télécom SudParis, Laboratoire SAMOVAR, Evry, France)
- **1571201103: Data Clustering-based False Information Detection for Secure Connected and Autonomous Vehicles**
Abinash Borah and Anirudh Paranjothi (Oklahoma State University, USA); Mohammad S Khan (East Tennessee State University, USA)
- **1571202519: Automated Railway Surface Defect Detection and Classification Using Transfer Learning**
Roshni Mustafa Soho (Mehran University of Engineering and Technology, Pakistan & University of Malaga, Spain); Sanam Narejo (Politecnico Di Torino, Italy); Muhammad Zakir Shaikh (MUET, Pakistan); Muhammad Khalid (NCRA-CMS Lab, Mehran University of Engineering and Technology (MUET), Pakistan); Enrique Nava Baro (Universidad de Malaga, Spain); Agata Manolova (Technical University of Sofia, Bulgaria)

Technical Session M2: Science and Technology for Humanity and Sustainable Future

Time: 11:00 – 13:00

Room: Room 2

- **1571188134: Enhancing Liquid Water Content Estimation Accuracy through Large-Scale Radar Data and Advanced Processing**
Yosuke Oya, Zheng Wen, Wataru Kameyama, Dingjie Peng, Xun Su and Kazuhiko Tamesue (Waseda University, Japan); Hiroyuki Kasai (WASEDA University, Japan); Takuro Sato (Waseda University, Japan)
- **1571191247: Attention is All Railway Wheels Need in the 21st Century: Revolutionizing Real-Time Defect Detection with NCRA-YOLO**
Muhammad Zakir Shaikh (MUET, Pakistan); Sahil Ali Jatoti (Mehran University of Engineering and Technology, Pakistan & National Centre of Robotics and Automation, Pakistan); Enrique Nava Baro (Universidad de Malaga, Spain); Bushra Abro (Mehran University of Engineering and Technology, Pakistan); Agata Manolova (Technical University of Sofia, Bulgaria); Bhawani Chowdhry (Mehran University of Eng & Technology, Jamshoro, Pakistan)
- **1571195277: Assessing Risks of Wireless Multimedia-Based Remote Workforce Management using FMEA**
Sanjib Biswas (Amity University Kolkata, India & Association of Computing Machinery, USA); Mansi Rastogi (Assam University, India); Ramjee Prasad (CITF Global Capsule, Denmark); Alben Mihovska (SmartAvatar B.V., Denmark & Sofia Tech Park, RDIC, Intelligent Communications Infrastructure Lab, Bulgaria)
- **1571199267: Attention-based Models for Multiclass Classification of Diabetic Retinopathy**
Prabhleen Kaur and Ela Kumar (Indira Gandhi Delhi Technical University for Women, India); Ramjee Prasad (CITF Global Capsule, Denmark)
- **1571202593: A Digital Twin Approach to Assessing Post-Monsoon Air Quality Impacts of Agricultural Stubble Burning in Delhi**
Shivaleela R Arlimatti (TKIET, Warana University India, India & Universiti Utara Malaysia, Malaysia); Rajesh Gade (Tatyasaheb Kore Institute of Engineering & Technology, India); Peter Lindgren (Copenhagen Business School, Denmark); Suresh Dhanpal Mane (Shivaji University Kolhapur & Dr D Y Patil Pratisthans College of Engineering, SN, Kolhapur, India)

Technical Session M3: AI-Enabled Wireless Networks

Time: 14:00 – 16:00

Room: Room 1

- **1571196314: Local 5G Service Area Configuration Using Deep Learning-based Co-Channel Interference Prediction**
Chang-Woo Pyo (NICT, Japan); Masafumi Moriyama, Homare Murakami and Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan)
- **1571201519: Throughput analysis for IEEE 802.11be network taking into account the coexistence of MLO and legacy SLO devices**
Keigo Matsuda, Kosuke Sanada, Hiroyuki Hatano and Kazuo Mori (Mie University, Japan)
- **1571201805: UAV Flight Experiment with Long-distance and BLOS Multi-hop C2 Link in 169 MHz Band including Diffraction by Small Hills**
Takashi Matsuda, Ryu Miura, Masaaki Maruyama and Miho Koshikawa (National Institute of Information and Communications Technology, Japan); Kaheita Yuki (Oita Industrial Research Institute, Japan); Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan)
- **1571201814: Jitter Distribution Analysis for Multi-Hop Relay Transmission in Vehicle Platooning with C-V2X Sidelink Communication**
Issei Yurizono, Kosuke Sanada, Hiroyuki Hatano and Kazuo Mori (Mie University, Japan)
- **1571202496: Beam Acquisition and Tracking for LEO Based Non-Terrestrial Networks: A Learning Based Kalman Filter Approach**
Tzu-Yu Tseng (National Chung Cheng University, Taiwan); Shao-Yu Lien (National Yang Ming Chiao Tung University, Taiwan); Chih-Cheng Tseng (National Taiwan Ocean University, Taiwan); Yang Cao (Southwest Jiaotong University, China); Hua-Lung Tsai (Industrial Technology Research Institute, Taiwan)

Technical Session M4: Security, Privacy and Ethics

Time: 14:00 – 16:00

Room: Room 2

- **1571187538: Cybersecurity Risks to Industrial Control Systems in the Age of 5G and Beyond**
Ana Koren (River Publishers, Croatia); Ramjee Prasad (CITF Global Capsule, Denmark)
- **1571192675: Research on Analyzing the Antivirus Protection of a Workstation using the Metasploit Framework and TheFatRat**
Georgi Tsochev, Maria Nenova and Mihael Nikolov (Technical University of Sofia, Bulgaria)

- **1571196344: PostCrypt: A Lattice-Based Security Framework for Quantum-Resilient 5G/6G Mobile Networks**
Swaminathan Ramamurthy (Sharda University Agra, India); Sibaram Khara (Sharda University, Greater Noida, India); R Saravanakumar (Saveetha School of Engineering, Chennai, India)
- **1571199272: Security Hardening of Ubuntu 22.04 LTS: Practical CIS Benchmark Implementation and Wazuh Monitoring**
Maria Nenova and Rumen Doynov (Technical University of Sofia, Bulgaria)
- **1571199459: Modeling Human Risk in Cybersecurity: Predicting Social Engineering Susceptibility via Psychological and Behavioral Analytics**
Ali El Attar (Arab Open University (AOU), Lebanon); Mohammed Ibrahim El-hajj (Arab Open University - Lebanon (AOU), Lebanon)

Technical Session M5: Applications, Testbed, Use Cases and 6G Planning

Time: 16:15 – 18:15

Room: Room 1

- **1571196559: Fundamental Study on the Dynamic Deployment Scheme of the Radio Propagation Parameters on the Layer-Management Enabled Wireless Emulator**
Fumihide Kojima, Masahiro Takagi, Shinsuke Miwa and Toshiyuki Miyachi (National Institute of Information and Communications Technology, Japan); Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan); Hirokazu Sawada and Hiroaki Harai (National Institute of Information and Communications Technology, Japan); Jun-ichi Takada (Institute of Science Tokyo, Japan); Hiroshi Harada (Kyoto University, Japan)
- **1571202183: Low-Latency Device-to-Network-to-Device Communication in SRv6-Based Future Mobile Networks: Toward Connected and Automated Vehicle Applications**
Manabu Mikami (Softbank Corp., Japan); Katsuhiro Horiba (SoftBank Corp. (at That Time), Japan); Satoru Matsushima (Softbank, Japan)
- **1571202434: Basic Experimental Evaluation of Coverage Extension by UE-to-UE Relay Communication with 5G-NR V2X Sidelink Signal**
Masaki Shimomura, Daiki Kawamatsu, Shota Mori, Yusuke Koda and Hiroshi Harada (Kyoto University, Japan)

Technical Session M6: Quantum Computing and Communications

Time: 16:15 – 18:15

Room: Room 2

- **1571199273: Hybrid Cryptography: A Framework for Post-Quantum Agility and Resilience**
Maria Nenova and Georgi Tsochev (Technical University of Sofia, Bulgaria)
- **1571202591: Quantum Optical Implementation of Adaptive Quantum State Tomography**
Phillip Cornett, Albert Barron Dinkins V, Lucas Vogeli, Kwang-Cheng Chen and Andreas Muller (University of South Florida, USA)
- **1571202690: Imbalanced Quantum Channels in Quantum Teleportation and Quantum Repeater Schemes**
Lucas Vogeli, Phillip Cornett, Albert Barron Dinkins V and Kwang-Cheng Chen (University of South Florida, USA)

Special Sessions

Special Session SS1: Tactile Internet 6G: Sensing, Intelligence & Immersive Realities (Reconnection)

Time: 14:00 – 16:00

Room: Room 3

- **1571195007: Geometric Feature Extraction for Robust Grasp Modeling in 3D Environments**
Nomane Belouahchi (Aix Marseille Univ, CNRS, LIS, France); Nicole Christoff, Radostina Petkova and Krasimir Tonchev (Technical University of Sofia, Bulgaria)
- **1571197189: Learning-Based Dynamic Point Cloud Transmission**
Ivaylo Bozhilov, Radostina Petkova, Krasimir Tonchev and Agata Manolova (Technical University of Sofia, Bulgaria)
- **1571201238: Performance Analysis of 8PSK Modulation for CubeSat Links under Nonlinearity, Phase Noise and Additive Gaussian White Noise Channel**
Marin Nedelchev (Technical University of Sofia, Bulgaria); Daniel Iliev (Technical University Sofia, Bulgaria)
- **1571201675: Feature-Level Cross-View Fusion for Calibration-Free 3D Human Pose Estimation**
Krasimir Tonchev, Nikolay Neshov, Radostina Petkova, Nicole Christoff and Agata Manolova (Technical University of Sofia, Bulgaria)

- **1571202417: Can rigid body transformation be applied in the latent domain of compressed multi-view point clouds?**
Radostina Petkova, Ivaylo Bozhilov, Krasimir Tonchev, Agata Manolova and Vladimir K. Poulkov (Technical University of Sofia, Bulgaria)

Special Session SS2: Sustainable Future Communication Networks and Technologies (GREENBEAT)

Time: 16:15 – 18:15

Room: Room 3

- **1571182079: Students' attitudes towards online language learning applications on smartphones**
Despoina N. Gkountara (University of Huddersfield, United Kingdom (Great Britain)); Ramjee Prasad (CITF Global Capsule, Denmark); Vladimir K. Poulkov, Agata Manolova, Yana Tsankova and Todora Yaneva (Technical University of Sofia, Bulgaria); Stamatia Rizou (Singular Logic, Greece); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain))
- **1571187822: Evaluation of Advanced Broadcast Multichannel Mechanisms for Vehicular Networks**
Felipe Garcia-Vidal (Universidad Politecnica de Cartagena, Spain); Esteban Egea-Lopez (Universidad Politécnica de Cartagena (UPCT), Spain); Jose Santa (Technical University of Cartagena, Spain)
- **1571196415: Rethinking Space Systems Design: Backward Compatibility to Minimize Future Space Occupation**
Marina Ruggieri (University of Roma Tor Vergata, Rome, Italy); Tommaso Badino and Carlo Alessandro (University of Roma Tor Vergata, Italy); Tommaso Rossi (University of Rome "Tor Vergata", Italy); Ernestina Cianca (University of Roma Tor Vergata, Italy); Mauro De Sanctis (University of Rome "Tor Vergata", Italy)
- **1571196609: Low-resource Human Activity Recognition using Self-attention based CNNs**
Vasil Vasilev (Technology School Electronic Systems (TUES), Bulgaria); Maria Nenova (Technical University of Sofia, Bulgaria); Vasil Shterev (Free Researcher, Bulgaria)
- **1571202623: Deep Learning-based Geometry Compression of Point Cloud Data**
Mila Aldimirova (Technical University Sofia & Telilab, Bulgaria); Radostina Petkova, Ivaylo Bozhilov, Krasimir Tonchev, Agata Manolova and Vladimir K. Poulkov (Technical University of Sofia, Bulgaria)

November 11, 2025 (Tuesday)

Technical Sessions

Technical Session M7: Sensor Networks and Smart Applications. Robotic Networking and Automation

Time: 11:00 – 13:00

Room: Room 1

- **1571185135: FVTVO: A FasterViT-Based Model for End-to-End Monocular Visual Odometry**
Meize Chen, Dingjie Peng, Zhihe Zhang, Zheng Wen, Hiroshi Onoda and Jiang Liu (Waseda University, Japan)
- **1571185459: Architecting the Future Factory: Industrial PLC-IoT, Digital Twins and Predictive AI based Maintenance**
Cornelia-Ionela Bădoi (The National University of Science and Technology Politehnica Bucharest, Romania); Bilge Kartal (Ege University, Turkey); Kamil Çetin and Çağdaş Karataş (Izmir Katip Çelebi University, Turkey); Mehmet Erdal Özbek (Izmir Katip Celebi University, Turkey); Savaş Şahin (Izmir Katip Çelebi University, Turkey)
- **1571188428: Optimize Resource Allocation in 5G DUDe Networks based on Game Theory Algorithms**
Athanasios Kapnias (University of Patras, Greece); Apostolos Gkamas (University of Ioannina, Greece); Christos J Bouras (University of Patras - ELKE, Greece)
- **1571196514: Vision-Based Real-time Hazard Identification and Alerting for Rider Assistance**
Mohamed Abdelazeem and Milad Ghantous (German University in Cairo, Egypt); Hassan Soubra (ECE, France)
- **1571196517: Vision-Based Virtual Lane Generation for Bikes in Laneless Urban Environments**
Saher Askander (GUC, Egypt); Milad Ghantous (German University in Cairo, Egypt); Hassan Soubra (ECE, France)

Technical Session M8: Communication Spectrum and Technologies

Time: 11:00 – 13:00

Room: Room 2

- **1571185305: Complexity Reduced Colored Noise Cancellation For Uplink Overloaded MIMO Spatial Multiplexing**
Satoshi Denno, Takumi Sugimoto and Yafei Hou (Okayama University, Japan)
- **1571185348: Experimental Evaluation of Joint Sparse Angular-Frequency Spectrum Sensing based on Compressive Sensing**

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

- **1571188241: ICA-Based Grant-Free Access With DPSK-Aided Carrier Frequency Offset Compensation**

Mitsutoshi Nakata, Takanori Hara and Kenichi Higuchi (Tokyo University of Science, Japan)

- **1571196489: Enhancing Power Saving Effect and Suppressing Latency Increase of C-DRX Operation Through Base Station Sleep Control**

Yuma Shishido, Takanori Hara and Kenichi Higuchi (Tokyo University of Science, Japan)

- **1571196750: Experimental Evaluation of an OFDM THz Communication System with LDPC and Turbo Codes**

Kazuya Takashima, Masafumi Moriyama and Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan)

Technical Session M9: Sensor Networks and Smart Applications. Robotic Networking and Automation

Time: 14:00 – 16:00

Room: Room 1

- **1571202305: Design of Splitting Visual SLAM Computing for Mobile Robot**

Yu-Lun Yan (National Chung Cheng University, Taiwan); Shao-Yu Lien (National Yang Ming Chiao Tung University, Taiwan); Chih-Cheng Tseng (National Taiwan Ocean University, Taiwan)

- **1571202380: Hierarchical Scan Matching for High Accuracy Localization for Kidnapped Robots**

Gheng-Hung Lu (National Chung Cheng University, Taiwan); Shao-Yu Lien (National Yang Ming Chiao Tung University, Taiwan); Chih-Cheng Tseng (National Taiwan Ocean University, Taiwan)

- **1571203486: Automated Network Testing in Programmable Infrastructures: A study of Batfish, pyATS and SuzieQ**

Kamelia Nikolova and Spas Veselinov Georgiev (Technical University of Sofia, Bulgaria)

- **1571182639: Enhanced Local and Global Feature Fusion for Vision Transformer-Based Self-Supervised Depth Estimation under Adverse Weather Conditions**

Dingjie Peng, Wataru Kameyama and Zheng Wen (Waseda University, Japan)

- **1571185139: HS-VO: A Homogenized-Structural RGB-D Visual Odometry under Manhattan World Assumption**

Zhihe Zhang, Jianing Zhang and Zheng Wen (Waseda University, Japan)

Technical Session M10: Communication Spectrum and Technologies

Time: 14:00 – 16:00

Room: Room 2

- **1571185762: Directional Interference Reduction for 5G Massive MIMO Systems Using Codebook Subset Restriction**
Koji Tashiro, Kenji Hoshino and Atsushi Nagate (SoftBank Corp., Japan)
- **1571188217: Data Rate Enhancement in Combined Ranging and Communication FMCW Radar Using Frequency-Hopped Sweep Functions**
Haruka Hataki and Kohei Ohno (Meiji University, Japan)
- **1571190122: Socially Motivated Energy-Efficient Wireless Caching Strategy with Saddle Point Approximation**
Zhanyuan Xie (China Telecom Research Institute, China); Zheng Jiang (China Telecom Corp. Ltd, China); Zhenkai Wang (China Telecom Corporation Limited ZheJiang Branch, China); Jianchi Zhu (China Telecom Research Institute, China); Shan Yang (China Telecom, China)
- **1571196436: Decentralized User Association Method to Minimize File Drop Rate in Co-existing Networks with HAPS and Terrestrial BSs**
Shoki Ikeda and Takanori Hara (Tokyo University of Science, Japan); Yuki Hokazono (NTT DOCOMO, Japan); Satoshi Suyama (NTT DOCOMO, INC, Japan); Satoshi Nagata (NTT DoCoMo, Inc., Japan); Kenichi Higuchi (Tokyo University of Science, Japan)

Technical Session M11: Sensor Networks and Smart Applications. Robotic Networking and Automation

Time: 16:15 – 18:15

Room: Room 1

- **1571193469: Search Trees: A Review and Comparative Study**
Mohammed Alaa Ala'anzy, Aknur Mansurkhan and Meruyert Oshayeva (SDU University, Kazakhstan); Alaa Fadhil Mahdi Al-hadeethi (Al-Hikma University College, Iraq); Ramis Akhmedov (SDU & SDU University, Kazakhstan); Omar Imhemed Alramli (Universiti Putra Malaysia, Malaysia); Omar Alnaseri (Baden-Wuerttemberg Cooperative State University, Germany)
- **1571196421: Long-Term Energy Efficiency Optimization for Energy Harvesting-Based D2D Communications under Non-Stationary Energy and Traffic Conditions**
Xubin Zhu and Ying Luo (SouthWest University of Science and Technology, China); Min Zeng (Southwest University of Science and Technology, China); Hong Jiang (SouthWest University of Science and Technology, China)
- **1571196663: Sustainable Wireless Sensor Network Deployment Using Federated Learning and Multi-Objective Optimization**
Amritesh Kumar Ojha (National Institute of Technology Patna Bihar, India); Bharat Gupta (National Institute of Technology Patna, India); Sanchita Ghosh (Institute of Engineering

and Management, India); Mohammad S Khan (East Tennessee State University, USA); Ramjee Prasad (CITF Global Capsule, Denmark)

- **1571202706: An IoT and Android Integrated Smart Urban Water Management System**
Mallikashree Mahadevi Singh (Datopic Technologies Private Limited, India & Banasthali Vidyapith, India); Prabha Shanker Mahawar (Banasthali Vidyapith, India); Shuvabrata Bandyopadhyaya (Banasthali Vidyapeeth Rajasthan, India); Soumya Ranjan Samal and Vladimir K. Poulkov (Technical University of Sofia, Bulgaria); Albena Mihovska (RDIC, Bulgaria); Antoni Ivanov (Technical University of Sofia, Bulgaria)

- **1571202709: Evaluating Energy Efficiency in LR-FHSS Networks under Successive Interference Cancellation**
Juliana El Rayess (Saint Joseph University of Beirut, Lebanon & Paris-Saclay University, France); Melhem El Helou (ESIB, Saint Joseph University of Beirut, Lebanon); Samer Lahoud (Dalhousie University, Canada); Kinda Khawam (Université de Versailles, France)

Technical Session M12: Communication Spectrum and Technologies

Time: 16:15 – 18:15

Room: Room 2

- **1571193409: Compact Dual-Element MIMO Antenna with Enhanced Isolation and Diversity at 55 GHz**
Touko Tcheutou Stephane Borel and Rashmi Priyadarshini (Sharda University, India); Sibaram Khara (Sharda University, Greater Noida, India)
- **1571195525: Joint Sparse Channel Estimation and Passive Beamforming in RIS-Aided D2D Communications**
Iqra Javid (Sharda University, India); Sibaram Khara (Sharda University, Greater Noida, India)
- **1571196451: Optimization Algorithm for MP Detection in OTFS over Fractional Doppler Channels**
Xinyu Hu (Southwest University of Science and Technology, China); Hong Jiang (SWUST, China); Qiuyun Zhang (Southwest University of Science and Technology, China); Ying Luo (Southwest University of Science and Technology, China); Min Zeng (Southwest University of Science and Technology, China)
- **1571202089: Scatterer-Parameterized Electromagnetic Channel Modeling and EDOF Analysis for MIMO Systems**
Wen Feng (Southwest University of Science and Technology, China); Hong Jiang (SWUST, China); Qiuyun Zhang (Southwest University of Science and Technology, China); Ying Luo (Southwest University of Science and Technology, China)

Special Sessions

Special Session SS3: AI-Driven Reconfigurable Systems and Multi-Connectivity Technologies for 6G Communications (6G-ICARUS)

Time: 11:00 – 13:00

Room: Room 3

- **1571186082: Detection and Mitigation of Yo-Yo and DDoS Attacks in Kubernetes-based B5G Infrastructures**
Razvan Mihai (University Politehnica of Bucharest & Orange Romania, Romania); Bianca Staicu (National University of Science and Technology Politehnica of Bucharest, Romania); Razvan Craciunescu (University Politehnica of Bucharest & Future Networks Lab, Romania); Nicolae Vizireanu (University Politehnica of Bucharest, Romania)
- **1571194747: IRS-Assisted Throughput Enhancement for Next-Generation Vehicular Communication Systems**
Javed Akhter and Ranjay Hazra (NIT Silchar, India); Albena Mihovska (SmartAvatar B.V., Denmark & Sofia Tech Park, RDIC, Intelligent Communications Infrastructure Lab, Bulgaria); Ramjee Prasad (CITF Global Capsule, Denmark)
- **1571195681: Experimental Characterization and Empirical Beam Steering Analysis of a 28 GHz 1-Bit 8x8 RIS Reflectarray via Conductivity Pattern Modulation**
Vasiliki Papapostolou and Alkiviadis Hatzopoulos (Aristotle University of Thessaloniki, Greece); Yiorgos Makris (University of Texas at Dallas, USA); Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece)
- **1571195898: Towards Secure Microservices in 6G Multi-Connectivity Networks: Graph-Aware Anomaly Detection Against DoS Attacks**
Seyed Salar Sefati (National University of Science and Technology Politehnica Bucharest, Romania); Albena Mihovska (SmartAvatar B.V., Denmark & Sofia Tech Park, RDIC, Intelligent Communications Infrastructure Lab, Bulgaria); Octavian Fratu and Simona V. Halunga (University Politehnica of Bucharest, Romania)
- **1571195903: A Real-Time Sybil Attack Detection for Vehicular Ad Hoc Networks (VANET) Using Spatio-Temporal Learning and XGBoost**
Seyed Salar Sefati (National University of Science and Technology Politehnica Bucharest, Romania); Astik Samal (Gruppo Maggioli, Italy); Octavian Fratu and Simona V. Halunga (University Politehnica of Bucharest, Romania)
- **1571196528: Lightweight Residual Networks with Ghost Blocks for Efficient Direction-of-Arrival Estimation**
Constantinos Mylonakis and Nikolaos Evangelidis (Aristotle University of Thessaloniki, Greece); Pantelis Velanas and Aikaterini Margariti (Acceligen Ltd, Cyprus); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain)); Nikolaos V. Kantartzis, Sotirios Goudos and Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece)

Special Session SS4: AI-Driven Reconfigurable Systems and Multi-Connectivity Technologies for 6G Communications (6G-ICARUS)

Time: 14:00 – 16:00

Room: Room 3

- **1571196850: A Dual Function Metasurface Based on Aluminium Gallium Arsenide PIN Diodes**
Irsat Gulen (University of Birmingham, United Kingdom (Great Britain) & University of Huddersfield, United Kingdom (Great Britain)); Venkat Reddy Kandregula (University of Huddersfield, United Kingdom (Great Britain)); Savvas Chalkidis (University of Birmingham, United Kingdom (Great Britain)); Stamatia Rizou (Singular Logic, Greece); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain)); Alexandros Feresidis (University of Birmingham, United Kingdom (Great Britain)); Evangelos Vassos (Steatite Antennas, United Kingdom (Great Britain))
- **1571196885: A Novel Co-polar Amplitude Control Metasurface based on Air-Bridged Schottky diodes**
Savvas Chalkidis (University of Birmingham, United Kingdom (Great Britain)); Evangelos Vassos (RF & Microwave Engineering, Steatite Antennas, Leominster, UK); Alexandros Feresidis (University of Birmingham, United Kingdom (Great Britain))
- **1571197175: Design Process for a Dual Pattern Reconfigurable Antenna based on flip-chip Aluminum Gallium Arsenide (AlGaAs) PIN diodes**
Venkat Reddy Kandregula and Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain)); Irsat Gulen (University of Birmingham, United Kingdom (Great Britain) & University of Huddersfield, United Kingdom (Great Britain)); Savvas Chalkidis and Alexandros Feresidis (University of Birmingham, United Kingdom (Great Britain)); Vladimir K. Poulkov (Technical University of Sofia, Bulgaria); Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece); Evangelos Vassos (Steatite Antennas, United Kingdom (Great Britain))
- **1571185924: Enhanced Residual Networks with Squeeze-and-Excitation Blocks for Multi-Signal DoA Estimation**
Constantinos Mylonakis and Nikolaos Evangelidis (Aristotle University of Thessaloniki, Greece); Pantelis Velanas (Acceligen Ltd, Cyprus); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain)); Nikolaos V. Kantartzis, Sotirios Goudos and Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece)
- **1571186561: Transformer DNNs for Versatile CSI-Based Wireless Communication and Localization**
Stefan Schwarz and Kaifeng Lu (TU Wien, Austria); Markus Rupp (Technische Universität Wien, Austria)
- **1571187527: Enhancing Wireless Communications via Orbital Angular Momentum Schemes enabled by Reconfigurable Holographic Metasurfaces**

Athanasios Nousiou and Alexandros Pitilakis (Aristotle University of Thessaloniki, Greece); Christos Liaskos (University of Ioannina, Greece & Foundation of Research and Technology Hellas, Greece); Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain)); Antonino Albanese (Italtel, Italy); Nikolaos V. Kantartzis (Aristotle University of Thessaloniki, Greece)

Special Session SS5: Integrated Sensing and AI-Driven Communication in 6G Perceptive Mobile Networks (ISAC-NEWTON)

Time: 16:15 – 18:15

Room: Room 3

- **1571194684: Deep Learning-Based Human Activity Classification with OTFS Radar and Attention-Enhanced LSTM Networks**
Malek Ali (Brno University of Technology, Czech Republic & NXP Company, Czech Republic); Roman Marsalek (Brno University of Technology, Czech Republic)
- **1571196650: Novel Frequency Domain Signal Processing for DFTs-OFDM Radar using Zadoff-Chu Sequence**
Masahiro Umehira (Nanzan University, Japan & Ibaraki University, Japan); Yasushi Takatori (Nanzan University, Japan & NTT Corporation, Japan)
- **1571201640: Design of a Metallic Reflectarray Antenna for Satellite Communications**
Ishq Adam, Nigel Schofield and Alistair Sambell (University of Huddersfield, United Kingdom (Great Britain)); Vladimir K. Poulkov (Technical University of Sofia, Bulgaria); Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain)); Evangelos Vassos (Steatite Antennas, United Kingdom (Great Britain))
- **1571202127: Enhanced Range and Velocity Estimation in Carrier Aggregated ISAC via Lattice Pilots and Coarse-to-Fine Processing**
Luyao Zhou, Ping Yang, Gang Wu and Yue Xiao (University of Electronic Science and Technology of China, China); Agata Manolova and Vladimir K. Poulkov (Technical University of Sofia, Bulgaria)
- **1571202437: Yagi-Uda Antenna for TV Reception Rejecting 5G Communication Band Signals**
Ishq Adam, Nigel Schofield and Alistair Sambell (University of Huddersfield, United Kingdom (Great Britain)); Zaharias D. Zaharis (Aristotle University of Thessaloniki, Greece); Qasim Zeeshan Ahmed (University of Huddersfield, United Kingdom (Great Britain)); Vladimir K. Poulkov (Technical University of Sofia, Bulgaria); Ioannis Chochliouros (Hellenic Telecommunications Organization S.A. (OTE), Greece); Evangelos Vassos (Steatite Antennas, United Kingdom (Great Britain)); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain))

November 12, 2025 (Wednesday)

Workshop

Workshop WS2: O-RAN

Time: 9:00 – 11:00

Room: Room 3

- **1571180859: Propagation Channel Modeling for Wireless Emulator and its Integration with Discrete-event Simulators in Industrial Environments**
Azril Haniz and Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan)
- **1571185186: Lasercom Technology Implementation Challenges Towards 6G Non-Terrestrial Networks**
Dimitar R. Kolev (National Institute of Information and Communications Technology (NICT), Japan); Alberto Carrasco-Casado and Koichi Shiratama (National Institute of Information and Communications Technology, Japan); Hideaki Kotake (National Institute of Information and Communication Technology, Japan); Yasushi Munemasa (Ministry of Internal Affairs and Communications, Japan); Yoshihiko Saito, Hiroyuki Tsuji and Amane Miura (National Institute of Information and Communications Technology, Japan)
- **1571188037: Meteorological Data Utilization in Site Diversity for Satellite Optical Links**
Hiroyuki Tsuji (National Institute of Information and Communications Technology, Japan); Dimitar R. Kolev (National Institute of Information and Communications Technology (NICT), Japan)
- **1571188200: Role, Technological Challenges, and R&D activity of GEO Satellite in 6G Multi-Orbit Network**
Amane Miura, Toshihiro Kubo-oka, Yasushi Munemasa, Takashi Takahashi, Hiroyuki Tsuji and Morio Toyoshima (National Institute of Information and Communications Technology, Japan)
- **1571200605: Emulator-based Evaluation of Delay, Doppler, and Propagation Effects in Mobile Satellite Communications**
Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan & Kyoto University, Japan); Hirokazu Sawada (National Institute of Information and Communications Technology, Japan); Tomoshige Kan (AstroTerrace Inc., Japan); Byeongpyo Jeong and Hiroyuki Tsuji (National Institute of Information and Communications Technology, Japan)