

Monday, 12.05.2025

12:00-13:00	Registration					
13:00-13:15	Opening ceremony (prof. Prokeš)					
13:15-14:00	Special session (doc. Polívka), Room A					
14:00-15:00	Refreshment					
15:00-16:30	Session Room A - Communications (doc. Frýza)			Session Room B - Circuits (doc. Šotner)		
15:00-15:15	1571115736	Exploring Deep Learning Architectures for RF Signal Classification	Ladislav Polak; Samuel Turak; Roman Šotner; Jan Kufa; Roman Marsalek; Arvind Dhaka	1571120237	High-Matching Current-Starved Inverter for Two-Dimensional Vernier Time-to-Digital Converter	Marek Svoboda; Pavel Horský
15:15-15:30	1571115748	Cost-Effective Measurement Setup for Analyzing Signal Coverage in 4G/5G Mobile Networks	Ladislav Polak; Michal Baranek; Jan Kufa; Roman Šotner; Jiřka Dluha	1571124621	SPICE Implementation of Morrison-Valsa Model of Constant Phase Element with Adjustable Parameters	Dalibor Birolek; Viera Biolkova; Zdenek Kolka
15:30-15:45	1571124786	Comparison of Prototype Filters for FBMC-OQAM Systems	Mohammed Abdulzahra AL-Dulaimi; Bence Cseppentő; Zsolt Kollár	1571124862	Design of Ultra-Wideband Large Current Radiator Driver for M-Sequence Sensor Systems	Miroslav Sokol; Pavol Galajda; Patrik Jurik
15:45-16:00	1571125020	Challenges in Optimizing Routing Protocols in Ad Hoc Mobile Networks	Rafal Brys; Krzysztof Kosmowski; Marek Suchanski	1571124902	HBT and MOSFET High Frequency VCO Implemented in 130 nm SiGe BiCMOS Technology	Patrik Jurik; Pavol Galajda; Miroslav Sokol
16:00-16:15	1571125059	Sentiment Analysis Using Transformer Models: BERT, T5, and GPT	Zuzana Sokolová; Maros Harahus; Miroslav Sokol; Eva Kucpova; Matus Pleva	1571125345	Design and Implementation of a Compact Digital Frequency Modulator in an ASIC	Ondrej Kolar; Jan Kral; Michal Kubicek; Ales Povalac
16:15-16:30	1571123273	Modification of CNN Model for mMIMO CSI Localization	Juraj Machaj; Matej Chudovský; Peter Brida; Bohumil Adamec	1571125385	A Comparator-Based Pulse Height Analyzer for Gamma Spectroscopy	Marek Karlicek; Michal Dudka; Tomas Fryza
16:30-17:00	Coffee break			Poster session A		
17:00-18:30	Session Room A - Signals AI (prof. Hudec)			Session Room B - Antennas (doc. Láčik)		
17:00-17:15	1571122871	Machine Learning-Assisted Deterministic Satellite Localization Using Doppler Analysis to Counter GPS...	Hosam Alameh; Bradley Hays	1571123088	Groove Gap Waveguide Crossover for Butler Matrices and Beamforming in Millimeter-Wave Satellite Antenna Systems	Mohammad Alibakhshikenari; Peiman Parand; Aii Zhdour; Bal Virdes; Lida Kouhalvandi; Patrick Ettore Longhi; Takfarinas Saber; Ernesto Limiti
17:15-17:30	1571123092	Development of an Efficient and Fast Computational Tool for Multi-Precision Floating Point Numbers	László Leitold; Bence Cseppentő; Zsolt Kollár	1571121993	Multi-Objective Optimization of Vector Fitting for Accurate and Compact s-Parameter Models	Petr Kadlec; Vojtěch Bednarský; Ming Shen
17:30-17:45	1571125321	A Deep Learning Approach to Multi-Path Component Detection in Power Delay Profiles	Ondřej Zelený; Radek Zavorka; Ales Prokes; Tomas Fryza; Jaroslav Wojturi; Jan M Kelner; Cezary Ziolkowski; Aniruddha Chandra	1571125393	Frequency Selective Double Mushroom-Type Scatterer for Sensing Purposes	Milan Polívka; Viktor Rosman
17:45-18:00	1571123792	AI-Enhanced Annotation Tool for Aneurysm Medical Image Labeling	Martin Paralic; Patrik Kamencay; Robert Hudec	1571124966	Resonant Spaceplate: Comparison of Unite Cells	Filip Dusek; Jaroslav Lacik
18:00-18:15	1571124173	A New Approach for Classification Intracranial Aneurysm Using GRU and 2D Convolution Layers	Roberta Hlavata; Patrik Kamencay; Robert Hudec; Peter Sykora; Miroslav Benco	1571125355	The Low-Cost ANN Surrogate-Based Multi-Objective Optimization Method for Designing UWB Antennas	Vojtěch Bednarský; Petr Kadlec; Ming Shen
18:15-18:30	1571124315	A New Approach for Detection Intracranial Aneurysm	Patrik Kamencay; Peter Sykora; Roberta Hlavata; Robert Hudec	...		1571124208 Computer Network Security and Analysis of the Use of Artificial Intelligence in Protection Michal Hraška; Ján Kubaš; Jozef Papán
19:00-21:00	Welcome dinner					

Registration

Day 1

Tuesday, 13.05.2025

Day 2

9:00-10:15	Session Room A - Communications (prof. Galajda)			Session Room B - Antennas (doc. Láčik)			Poster session B		
9:00-9:15	1571117233	Lessons Learned from the First Year of Operations of the PRETTY CubeSat for Future Small Satellite Missions	Andreas Johann Hörmer; Manuela Wenger	1571124000	LSTM-Based PDP Predictions for Intra-Bus Wireless Propagation	Rajeev Shukla; Atharva Verma; Aniruddha Chandra; Radek Zavorka; Jiri Blumenstein; Ales Prokes; Jaroslav Wojtuř; Jan M Kelner; Cezary Ziolkowski; Domenico Cluonzo	1571124178	Development of a Custom MANET Simulator with Enhanced Integration of AI-Based Routing Protocols	Jozef Badár; Ján Papaj
9:15-9:30	1571124594	TROLL Satellite Mission - Communication Aspects of the Largest Czech Commercial Satellite	Petr Kadára; Tomáš Svoboda; Jakub Zika; Martin Mačák	1571124068	Framework for Indoor Wireless Propagation Modeling Through Wireless Insite®	Arao Zau Macaia; Niraj Narayan; Rajeev Shukla; Aniruddha Chandra; Radek Zavorka; Jiri Blumenstein; Ales Prokes; Jaroslav Wojtuř; Jan M Kelner; Cezary Ziolkowski	1571124708	Efficient Acronymization of Sensitive Data Using Generative Models Fine-Tuned on LLM-Augmented Data	Kristian Sopkovic; Eva Kupcova; Matus Pleva; Daniel Hladek
9:30-9:45	1571125398	Analysis of LoRa Uplink for Meteorological Data Transmission from a Remote Station to a CubeSat	Šimon Sloboda; Jiri Veverka	1571124466	Simple Fiber Ring Laser with Unpumped Erbium-Doped Fiber	Peter Barcik; Vit Novotny; Petr Sysel	1571124917	Evaluating YOLOv11's Role in Robust Real-Time Object Detection for Autonomous Driving	Marcel Simeonov; Patrik Kamencay; Milan Dado
9:45-10:00	1571122334	Microcontroller-Based Encryption Module for Secure Internet Client-Server Chatting	Nikita Kuropatkin; Milos Drutarovsky	1571125392	Microdiversity and Vegetation Influence on Forward Scattering at 60 GHz and 80 GHz	Radek Zavorka; Ondřej Zelený; Jiri Blumenstein; Tomas Mikulasek; Rajeev Shukla; Josef Vychodil; Jaroslav Wojtuř; Niraj Narayan; Aniruddha Chandra; Jan M Kelner; Cezary Ziolkowski; Ales Prokes	1571124740	Grammatical Error Correction in Slovak Using Neural Machine Translation and No Language Left Behind	Maros Harahus; Zuzana Sokolová; Matus Pleva; Miroslav Sokol
10:00-10:15	1571124620	Comparative Security Analysis of Apple Pay and Google Wallet: Strengths, Weaknesses, and Threats	Hosam Alameh; Sima Jafarikhah; Baker Al Smadi	1571125394	On the Phase Demodulation for the Phase Optical Time-Domain Reflectometry	Peter Barcik; Petr Sysel; Josef Vychodil; Vit Novotny; Martin Pospíšil; Ales Prokes	1571109080	Marine Debris Detection From Sentinel-2	Nima Saghi; Jan Pidanic; Amit Kumar Mishra
10:15-10:45	Coffee break						1571108639	Four Novel Circuit Topologies of Weakly Hyperchaotic Oscillators	Jiri Petrzela
10:45-11:30	Company presentations, Room A (Rohde & Schwarz)						1571124900	Hilbert Transform of Incoherently Sampled Signal	Karel Hajek
11:30-12:00	Company presentations, Room A (H TEST a.s.)								
12:00-13:15	Lunch								
13:15-14:00	Special session (prof. Mecklenbräuer), Room A								
14:00-14:30	Company presentations, Room A (ON SEMI)								
14:30-14:45	Company presentations, Room A (RETIA, a.s.)								
15:00-18:30	Visiting the town of Znojmo, Znojmo underground, Šobes vineyard, Hnanice wine cellars, Šatov painted cellar								
19:00-23:00	Gala dinner								

Registration

Wednesday, 14.05.2025

9:00 - 10:00		Session Room A - Signals AI (prof. Drutarovský)			Session Room B - Circuits (doc. Šotner)		
9:00-9:15	1571116087	Comparison of Feature Extraction Algorithms for Speech-Based Emotional Stress Level Detection	Ján Staš; Katarína Škotková; Lukáš Hudák	1571120393	Low-Complexity Autonomous RC Time Constant Calibration for Accuracy Improvement of CMOS Analog Frequency Filters	Vratislav Michal	
9:15-9:30	1571125236	Spatial Sound Source Localization in Virtual Acoustic Space for Multiple Head Related Transfer Functions	Martin Novotný; Vojtěch Ledvína; František Rund	1571125214	On-Chip Digital Calibration of Low-Voltage Operational Amplifier in CMOS	Michal Šovčík; Daniel Arbet; Lukas Nagy; Viera Stopjakova	
9:30-9:45	1571124312	Capacity and Performance Test Methods for Cloud-Based Telecommunication Network Functions	Attila Gábor Hilt; Gábor Járó; Andrea Farkasvolgyi	1571124835	Design of Area-Efficient Memristor-Based XOR and XNOR Gates	Ananda YR	
9:45-10:00	1571120018	Dispersion Limitation of Digital Signal and Carrier Distribution in Optical-Wireless Networks	Attila Gábor Hilt; Andrea Farkasvolgyi	1571124839	Two MOSFETs Based Inverse Memristor Emulator	Ananda YR	
10:00-10:30 Coffee break							
10:30-11:15		Session Room A - Communication (Dr. Vršecká)			Session Room B - Signals AI (doc. Frýza)		
10:30-10:45	1571125229	Out-of-Distribution Detection Using Knowledge Distillation	Ľubomír Králik; Peter Tarábek	1571120154	Open Dataset for Modeling Nonlinear Systems for Electric Guitar	Matej Huzvar; Stanislav Vitek	
10:45-11:00	1571123561	The Importance of Correlation Coefficients in Optimizing Input Data for Hybrid FSO/RF Systems	Zuzana Liščinská; Luboš Ovseník; Jakub Oravec	1571124007	Deep Reinforcement Learning for Energy-Efficient Secure Dual UAV-Assisted Networks	Gaurav Kumar Pandey; M J Nikitha; Uppala Harini; Vishal Pal; Devendra Singh Gurjar; Suneel Yadav; Juraj Gazda	
11:00-11:15	1571123515	ESP32 Microcontroller Based Lightweight TLS 1.3 Client for IoT Applications	Jaroslav Pajkos; Eva Kupcova; Matus Pleva; Milos Drutarovsky	1571124011	Exploiting Direct Link in RIS-Aided Two-Way Communications with Traffic Asymmetry	Suneel Yadav; Radhika Gour; Devendra Singh Gurjar; Juraj Gazda	
11:15-12:00 Closing session Room A (prof. Prokeš)							
12:00-13:15 Lunch							

Registration