

IEEE BlackSeaCom Technical Program

S1. Multicarrier Techniques Chair: Andreas Polydoros		
1	Sub-Band Precoded OFDM for Enhanced Physical Layer Resiliency in Wireless Communication Systems	Otilia Popescu and Dimitrie C. Popescu (Old Dominion University, USA)
2	Asymptotically optimal algorithm for OFDM-signal reception under AWGN and OFDM interference shifted in frequency	Andrey Rashich (Peter the Great St. Petersburg Polytechnic University, Russia); Valery Rashich (St. Petersburg Polytechnic University, Russia)
3	Hermite Polynomials Based Characterization of the received LLR's Distribution in OFDM transmissions	Mihály Varga (National Instruments Romania); Vasile Bota (Technical University of Cluj Napoca, Romania) and Horia Hedeşiu (National Instruments Romania)
4	Post Detection Integration in DFT Modulated Filter Bank Transceivers for Cognitive Radio	Nour Mansour and Dirk Dahlhaus (University of Kassel, Germany)
5	Multicomponent Signals for Bandwidth-Efficient Single-Carrier Modulation	Aleksandr Gelgor, Anton Gorlov and Evgenii Popov (Peter the Great St. Petersburg Polytechnic University, Russia)

S2. Cognitive radio Chair: Hanna Bogucka		
1	An Energy-Efficient Cooperative Spectrum Sensing	Krzysztof Cichoń and Hanna Bogucka (Poznan University of Technology, Poland)
2	Spectral Efficient and Interference-free Spectrum Sharing in Cognitive Radio Using Signal Space Diversity	Mohammadreza Babaei and Umit Aygözü (Istanbul Technical University, Turkey)
3	Horizontal Spectrum Sharing and Coexistence Scenarios for Mutually Interfering Wireless Systems	Saygin Bakşi and Dimitrie C. Popescu (Old Dominion University, USA)
4	Outage Performance for DF-based Two-Way Cognitive Relay Networks with Imperfect Channel State Information (CSI)	Pengwei Zhang (BUPT, P.R. China); Xing Zhang, Zhenhai Zhang, Xiang Hu and Haozhou Huang (Beijing University of Posts and Telecommunications, P.R. China)
5	Throughput-Oriented Connection Scheme for Cognitive Radio Networks	Wen-Hsing Kuo, Chi-Fu Lin and Yu-Ling Hung (Yuan Ze University, Taiwan)

S3. Source and Channel Coding Chair: Vasile Bota		
1	Variable length prefix (Delta, k)-codes	Igor Zavadskiy (Kyiv National Taras Shevchenko University, Ukraine); Anatoliy Anisimov (Ukraine)
2	LDPC Coded Modulation Schemes with Largely Unequal Error Protection	Giacomo Ricciutelli, Marco Baldi, Nicola Maturo and Franco Chiaraluce (Università Politecnica delle Marche, Italy)
3	Design of LDPC Code Ensembles with Fast Convergence Properties	Ian P Mulholland (University College Dublin, Ireland); Enrico Paolini (University of Bologna, Italy); Mark F. Flanagan (University College Dublin, Ireland)
4	Improving Energy Efficiency of Partial Response Signals by using Coded Modulation	Anton Gorlov, Aleksandr Gelgor and Evgenii Popov (Peter the Great St. Petersburg Polytechnic University, Russia)

S4. Transmission security Chair: Rafał Krenz		
1	On Secrecy Rate Analysis of Spatial Modulation and Space Shift Keying	Sina Rezaei Aghdam (Bilkent University, Turkey); Tolga M. Duman (Arizona State University, Bilkent University, Turkey); Marco Di Renzo (French National Center for Scientific Research, France)
2	Confidentiality of data in backbone networks based on scalable and dynamic environment technologies	Leszek Nowosielski, Radosław Wielemborek, Dariusz Laskowski and Marian Wnuk (Military University of Technology, Poland)
3	Jamming LTE signals	Rafał Krenz (Poznan University of Technology, Poland); Soumya Brahma (ITTI Poznan, Poland)
4	Radio Specific Emitter Identification based on nonlinear characteristics of signal	Yingjun Yuan (The College of Electronic Science and Engineering, National University of Defense Technology, P.R. China); Zhitao Huang, Fenghua Wang and Xiang Wang (College of Electronic Science and Engineering, NUDT, P.R. China)

S5. Special Session on Advances in Channel Coding Chair: Farbod Kayhan		
1	Analog Digital Belief Propagation and its Application to Multi Stage Decoding Systems	Guido Montorsi and Farbod Kayhan (Politecnico di Torino, Italy)
2	Evaluation of the Robustness of LDPC Encoders to Hardware Noise	Elsa Dupraz (ETIS, CNRS, ENSEA, University Cergy-Pontoise, France); David Declercq (ETIS lab. ENSEA/Cergy University/CNRS UMR, France)
3	On coding for Faster-Than-Nyquist Signaling	Romain Tajan (Bordeaux INP & IMS Laboratory, France); Bouchra Benammar (Technological Research Institute (Saint-Exupery), Toulouse, France); Charly Poulliat (INP - ENSEEIHT Toulouse, France); Marie-Laure Boucheret (University of Toulouse IRIT Enseeiht, France)
4	SC-LDPC Codes over the Block-Fading Channel: Robustness to a Synchronisation Offset	Iryna Andriyanova (ENSEA/UCP/CNRS, France); Najeeb Ul Hassan (Dresden University of Technology, Germany); Michael Lentmaier (Lund University, Sweden); Gerhard Fettweis (Technische Universität Dresden, Germany)

S6. Special Session on e-Health Applications Chair: Chiara Buratti		
1	Big Data Fusion for eHealth and Ambient Assisted Living Cloud Applications	George Suciu (Politehnica University of Bucharest & BEIA Consult International SRL, Romania); Alexandru Vulpe (University Politehnica of Bucharest, Romania); Razvan Craciunescu (Aalborg University & University Politehnica of Bucharest, Denmark); Cristina Butca (Politehnica University of Bucharest & Beia Consult International, Romania); Victor Suciu (BEIA / UPB, Romania)
2	A Software Radio Approach for Locating Unintentional Ozone-Generating Sources	Mirel Ciprian Paun (Universitatea Politehnica din Bucuresti & Universitatea Maritima din Constanta, Romania); Ion Marghescu (University Politehnica of Bucharest, Romania); Razvan D. Tamas (Constanta Maritime University, Romania)

3	Remote Assessment of Heart Rate by Skin Color Processing	Bogdan Gavrioloaia, Radu Vizireanu and Octavian Fratu (University Politehnica of Bucharest, Romania); Alin Berechet, Constantin Mara and Cristian Cucu (University of Pitesti, Romania)
4	eWALL radiofrequency energy harvesting system	Zeljko Martinovic (University of Zagreb & Faculty of Electrical Engineering and Computing, Croatia); Dora Budic, Roman Malaric and Dina Simunic (University of Zagreb, Croatia)

S7. Cloud-based services Chair: Octavian Fratu		
1	Open Source IAAS and PAAS Services in a Public Administration Datacenter	Enrica Salbaroli (Lepida SpA, Italy); Elisa Benetti (LepidaSpA, Italy); Gianluca Mazzini (University of Ferrara and LepidaSpA, Italy)
2	Improved Byte Caching Techniques	Ismail Demirkan (Istanbul Sehir University, Turkey)
3	Cloud and Big Data Acceleration Platform for Innovation in Environmental Industry	George Suciu (Politehnica University of Bucharest & BEIA Consult International SRL, Romania); Octavian Fratu and Alexandru Vulpe (University Politehnica of Bucharest, Romania); Cristina Butca (Politehnica University of Bucharest & Beia Consult International, Romania)

S8. Special Session on Software Defined Networking and Network Function Virtualisation for Next Generation Networks Chair: Roberto Verdone		
1	High Performance Computing and Network Function Virtualization: a major challenge towards network programmability	Pietro Paglierani (ITALTEL, Italy)
2	SDN orchestration and virtualization of heterogeneous multi-domain and multi-layer transport networks: The STRAUSS approach	Raul Muñoz and Ricard Vilalta (CTTC, Spain); Ramon Casellas (Centre Tecnologic de Telecomunicacions de Catalunya (CTTC), Spain); Ricardo Martinez (CTTC, Spain)
3	Fiber Access Network Architecture Featuring Distributed Processing and Function Virtualization	Theofanis G. Orphanoudakis, Evangelos Kosmatos, Chris Matrakidis and Alexandros Stavdas (University of Peloponnese, Greece)

S9. MIMO and adaptive antennas Chair: Hong Yang		
1	Performance Analysis of Energy-Detection-Based Massive SIMO	Marwan Hammouda, Sami Akin and Jürgen Peissig (Leibniz Universität Hannover, Germany)
2	Performance of Pilot Reuse in Multi-cell Massive MIMO	Hong Yang (Bell Labs & Alcatel-Lucent, USA); Tom Marzetta (Bell Labs, USA)
3	Multiple Antenna System for Smart Base Stations with Adaptive Direction of reception	Qassim MH Nasir (University Of Sharjah, UAE); Houcem Gazzah (University of Sharjah, UAE)
4	On the Reliability Performance of Distributed Alamouti-SFBC Schemes	Vasile Bota (Technical University of Cluj Napoca, Romania); Tudor-Mihai Pavel and Mihály Varga (Technical University of Cluj-Napoca, Romania)

S10. Smart communication networks Chair: Bachar A. ElHassan		
1	A Load-Considered Fast Media Independent Handover Control Scheme for Proxy Mobile IPv6 (LC-FMIH-PMIPv6) in the Multiple-Destination Environment	Chung-Ming Huang (National Cheng Kung University, Taiwan); Meng-Shu Chiang (Far East University, Taiwan); Pham Chau (National Cheng Kung University, Taiwan)
2	A Routing Based Resource Registry	Hristo Asenov, Stephen Sigwart and Chase Cotton (University of Delaware, USA)
3	Novel Reliable Range-free Geo-localization Algorithm in Wireless Networks: Centre of the Smallest Communication Overlap Polygon (CSCOP)	Samuel Asferaw Demilew and Dejene Ejigu (Addis Ababa University, Ethiopia); Georges Da-Costa (Université Paul Sabatier, France); Jean-Marc Pierson (Univerty Paul Sabatier, Toulouse, France)

S11. Signal Processing Chair: Flavio Zabini		
1	Impact of Echo Canceller Taps Quantization on Repeater Stability	Flavio Zabini (University of Bologna, Italy); Alex Calisti (IEIIT-CNR/BO - University of Bologna, Italy); Gianni Pasolini (University of Bologna, Italy)
2	An Algorithm for Synthesis of Binary Phase Manipulated Signals with Optimal Periodic Auto – Correlation Properties	Borislav Bedzhev (115 Universitetska Str. & University of Ruse "A. Kanchev", Bulgaria); Mihail Iliev (University of Ruse, Bulgaria)
3	Foveated Manifold Sensing for object recognition	Irina Burciu (University of Lübeck, Institute for Neuro- and Bioinformatics, Germany); Thomas Martinetz (University of Lübeck, Germany); Erhardt Barth (University of Luebeck, Germany)
4	Necessary Conditions for Synthesis of Side-Lobe Suppression Filters for Phase Manipulated Signals	Borislav Bedzhev (115 Universitetska Str. & University of Ruse "A. Kanchev", Bulgaria); Mihail Iliev (University of Ruse, Bulgaria)
5	Novel dual-mode double-band filter on dielectric resonators	Tetiana Pidhurska (National Technical University of Ukraine, Ukraine); Alexander Trubin (NTUU "Kyiv Polytechnic Institute", Ukraine); Ruslan Isniuk (National Technical University of Ukraine "Kyiv Polytechnic Institute", Ukraine)

S12. Wireless Access and Networking Chair: Cesare Roseti		
1	Distributed Robust Resource Allocation for Renewable Powered Wireless Cellular Networks	Yu Zhang (University of Minnesota, USA); Xin Wang (Fudan University, P.R. China); Georgios B. Giannakis (University of Minnesota, USA); Shuyan Hu (Fudan University, P.R. China)
2	A new RA-DA hybrid MAC approach for DVB-RCS2	F. Manlio Bacco (ISTI-CNR & University of Siena, Italy); Alberto Gotta (ISTI-CNR & CNIT, Italy); Michele Luglio (University of Rome Tor Vergata - Dip. Ing. Elettronica, Italy); Cesare Roseti and Francesco Zampognaro (University of Rome Tor Vergata, Italy)
3	Is it Worth to Predict Overflows during Video Streaming over Wireless Networks?	Dmitry Bankov (Institute for Information Transmission Problems (IITPRAS), Russia); Evgeny Khorov (IITPRAS & MIPT, Russia); Andrey Lyakhov (IITPRAS, Russia)
4	MAC-aware Routing in Wireless Sensor Networks	Lemia Louail (FEMTO-ST Institute & University of Franche-Comté, France);

		Violeta Felea (LIFC, Université de Franche-Comté, France); Julien Bernard (Université de Franche-Comté, France); Hervé Guyennet (Computer Science, France)
5	Uncoordinated Scheduling Strategies for BAN-to-BAN Interference Mitigation	Martina Barbi (University of Bologna, Italy); Kamran Sayrafian (NIST, USA); Mehdi Alasti (Time Warner Cable, USA)

Poster session		
Chair: Larisa Globa		
1	Improved Application for Perceptual Video Quality Measurement in Satellite Broadcasting	Ioan Tache (University Politehnica Bucuresti, Romania); Constantin Burlacu (University POLITEHNICA Bucuresti, Romania)
2	Recursive Recovery of Streaming Signals from Compressive Measurements	Uditha L. Wijewardhana (University of Oulu & Centre for Wireless Communications, Finland); Marian Codreanu (University of Oulu, Finland)
3	Poster: Privacy-Assured Range Query for Cloud-Assisted Body Sensor Systems	Chia-Mu Yu, I-Chen Tsai and Yu-Shen Ho (Yuan Ze University, Taiwan)
4	Demo: Secure Distributed Data Stream Analytics in Stealth Applications	Josef Spillner (Technische Universität Dresden, Germany)
5	Resource Sharing Mechanism for Device-to-Device Communication in Cellular Networks	Xulong Li (University of Electronic Science and Technology of China, P.R. China); Chen Jie (university of electro SCI&TECH of China, Hong Kong); Lang Chen (University of Electronic Science Technology of China, P.R. China); Shaoqian Li (University of Electronic Science and Technology of China, P.R. China)
6	Fast Lifting Wavelet Scheme Based ECG Compression Using Run Length Coding	Omar Abdulwahabe Mohamad (University of Politehnica in Bucharest, Romania)
7	The bit stream generation method for wideband radio network systems	Larysa Globa (National University of Technology of Ukraine "KPI" Kiev, Ukraine); Dmytro Lysenko and Tetiana Kot (National Technical University of Ukraine "Kyiv Polytechnic Institute", Ukraine)
8	Capacity and Mobility-based Routing Protocol for D2D Mesh Network	Yafeng Wang and Jiarui Xie (Beijing University of Posts and Telecommunications, P.R. China); Shuanshuan Wu (ZTE Corporation, P.R. China)
9	Clustering Energy Based Routing Protocol for Wireless Sensor Networks	Bachar A. ElHassan (Lebanese University, Faculty of Engineering, Branch1 & order of Engineers and Architects - Tripoli, Lebanon)
10	Coupling coefficients of the Spherical Dielectric Micro-resonators with Whispering gallery modes	Alexander Trubin (NTUU - Kyiv Polytechnic Institute, Ukraine)
11	Scheduling of the data center infrastructure resource utilization based on the statistics	Larysa Globa (National University of Technology of Ukraine "KPI" Kiev, Ukraine); Mariia Skulysh (National Technical University of Ukraine "Kyiv Polytechnic Institute", Ukraine); Tetiana Pidhurska (National Technical University of Ukraine, Ukraine)
12	The effectiveness of wireless transmission system using signal-code constructions on the criterion of maximum productivity	Leonid Uryvsky (National Technical University of Ukraine "Kyiv Polytechnic Institute", Ukraine); Serhiy Osypchuk (Institute of Telecommunication Systems & National Technical University of Ukraine, Ukraine)
13	Energy Saving Strategies for House-environment Wireless Sensor Networks	Josip Seljan, Goran Dimic, Dina Simunic and Petar Knezevic (University of Zagreb, Croatia)

Demo Session	
Chair: Tetiana Pidgurska	
1	Stealth Apps for Secure Distributed Analytics
2	Dual-band rectangular dielectric resonator filter
3	IEEE 802.11ac RX testbed
4	Highly Resistant Military Wireless Communication Radio Interface
5	A radio signal wavefront curvature phenomenon application for frequency resource reuse of digital microwave link
6	Method and Test Environment for Validation of Long Term Evolution Random Access Channel using Radio over Fiber
7	"Lubid calc" Satellite broadcasting & VSAT network planning
8	Dynamical Relay Node Placement Solution in MANETs