2015 IEEE International Black Sea Conference on Communications and Networking

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Program

Tutorial 1 (Part 1)

Green Heterogeneous Networks

Coffee Break

Tutorial 1 (Part 2)

Green Heterogeneous Networks

Lunch

Tutorial 2 (Part 1)

Network Infrastructure for the Internet of Things and M2M Communications

Coffee Break

Tutorial 2 (Part 2)

Network Infrastructure for the Internet of Things and M2M Communications

Opening Plenary

Scientific Challenges of 5G

Coffee Break

Multicarrier Techniques

Sub-Band Precoded OFDM for Enhanced Physical Layer Resiliency in Wireless Communication Systems
Otilia Popescu and Dimitrie C. Popescu (Old Dominion University, USA)
pp. 1-4

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)
pp. 5-8

Hermite Polynomials Based Characterization of the received LLR's Distribution in OFDM transmissions
Mihály Varga (National Instruments Romania, Romania); Vasile Bota (Technical University of Cluj Napoca, Romania); Horia Hedeşiu (National Instruments Romania, Romania)
pp. 9-13

Post Detection Integration in DFT Modulated Filter Bank Transceivers for Cognitive Radio
Nour Mansour and Dirk Dahlhaus (University of Kassel, Germany)
pp. 14-18

Multicomponent Signals for Bandwidth-Efficient Single-Carrier Modulation
Aleksandr Gelgor, Anton Gorlov and Evgenii Popov (Peter the Great St. Petersburg Polytechnic University, Russia)
pp. 19-23

Cognitive Radio

An Energy-Efficient Cooperative Spectrum Sensing
Krzysztof Cichoń and Hanna Bogucka (Poznan University of Technology, Poland)
pp. 24-28

Spectral Efficient and Interference-free Spectrum Sharing in Cognitive Radio Using Signal Space Diversity
Mohammadreza Babaei and Umit Aygölü (Istanbul Technical University, Turkey)
pp. 29-33

Horizontal Spectrum Sharing and Coexistence Scenarios for Mutually Interfering Wireless Systems
Saygın Bakşi and Dimitrie C. Popescu (Old Dominion University, USA)
pp. 34-37

Throughput-Oriented Connection Scheme for Cognitive Radio Networks
Wen-Hsing Kuo, Chi-Fu Lin and Yu-Ling Hung (Yuan Ze University, Taiwan)
pp. 38-42

Lunch

5G Mobile System - Is It Just New Frequency Bands or Did We Miss Something Crucial in Earlier Generations?

Coffee Break

Source and Channel Coding

Variable length prefix (Delta,k)-codes
Anatoliy Anisimov (Ukraine, Ukraine); Igor Zavadskyi (Kyiv National Taras Shevchenko University, Ukraine)
pp. 43-47

LDPC Coded Modulation Schemes with Largely Unequal Error Protection
Giacomo Ricciutelli, Marco Baldi, Nicola Maturo and Franco Chiaraluce (Università Politecnica delle Marche, Italy)
pp. 48-52

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)
pp. 53-57

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)
pp. 58-62

Transmission Security

On Secrecy Rate Analysis of Spatial Modulation and Space Shift Keying
Sina Rezaei Aghdam (Bilkent University, Turkey); Tolga M. Duman (Bilkent University & Arizona State University (ON LEAVE), Turkey); Marco Di Renzo (French National Center for Scientific Research (CNRS), France)
pp. 63-67

Opportunistically Cooperating Radios in Action

Coffee Break

Special Session on Advances in Channel Coding

Special Session on e-Health Applications

Lunch

Internet of Things - How to Break the Barriers for Business Development?

Coffee Break

Cloud Based Services

Special Session on Software Defined Networking and Network Function Virtualisation for Next Generation Networks

MIMO and Adaptive Antennas

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)
pp. 162-165

On the Reliability Performance of Distributed Alamouti-SFBC Schemes
Vasile Bota (Technical University of Cluj Napoca, Romania); Tudor-Mihai Pavel (Technical University of Cluj-Napoca, Romania); Mihály Varga (National Instruments Romania, Romania)
pp. 166-170

Smart Communication Networks

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)
pp. 171-175

A Routing Based Resource Registry
Hristo Asenov, Stephen Sigwart and Chase Cotton (University of Delaware, USA)
pp. 176-180

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)
pp. 181-185

Demo Session

Poster Session ! ˙B#5

Improved Application for Perceptual Video Quality Measurement in Satellite Broadcasting
Ioan Tache (University Politehnica Bucuresti, Romania); Constantin Burlacu (University POLITEHNICA Bucuresti, Romania)

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)

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)

Demo: Secure Distributed Data Stream Analytics in Stealth Applications
Josef Spillner (Technische Universität Dresden, Germany)

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)

Fast Lifting Wavelet Scheme Based ECG Compression Using Run Length Coding
Omar Abdulwahabe Mohamad (University of Politehnica in Bucharest, Romania)

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)

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)

Clustering Energy Based Routing Protocol for Wireless Sensor Networks
   Lina Nachabe (Instructor & AUCE Lebanon, Lebanon); Samir Haddad (University Val d'essonne, Lebanon); Marc C. Girod-Genet (Institut Mines-Télécom, France); Bachar A. ElHassan (Lebanese University, Faculty of Engineering, Branch1 & order of Engineers and Architects - Tripoli, Lebanon)

Coupling coefficients of the Spherical Dielectric Micro-resonators with Whispering gallery modes
   Alexander Trubin (NTUU "Kyiv Polytechnic Institute", Ukraine)

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)

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)

Energy Saving Strategies for House-environment Wireless Sensor Networks
   Josip Seljan, Goran Dimić, Petar Knezevic and Dina Simunic (University of Zagreb, Croatia)

Coffee Break

Signal Processing

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)
   pp. 186-190

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)
   pp. 191-195

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)
   pp. 196-200

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)
   pp. 201-205

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)
   pp. 206-209

Wireless Access and Networking

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)
   pp. 210-214

Closing/Lunch