

# TELSIKS 2017 Conference Program

Day	Time	Room			
		A	B	104	C / D
Tuesday October 17	09 <sup>00</sup>	Working group meeting of the COST Action IC 1407			
	17 <sup>00</sup>				
Wednesday October 18	08 <sup>00</sup>	Registration			
	10 <sup>00</sup>	Registration			
	10 <sup>30</sup>	Opening (Main Lecture Hall A1)			
	11 <sup>00</sup>	Plenary Session			
	12 <sup>00</sup>	TELSIKS Welcome Cocktail Party			
	14 <sup>00</sup>				
	16 <sup>00</sup>	CEM	BM		
	18 <sup>00</sup>				PO1-PO3
	20 <sup>00</sup>				
	22 <sup>00</sup>	Musical performance			
Thursday October 19	09 <sup>00</sup>	Registration			
	11 <sup>00</sup>	AP	IT	PUKOS	
	13 <sup>00</sup>	MT			DIACAS 2017
	15 <sup>00</sup>	Sightseeing tour			
	17 <sup>00</sup>	Sightseeing tour			
	19 <sup>00</sup>	Sightseeing tour			
	21 <sup>00</sup>	Conference Dinner			
		↓			
Friday October 20	10 <sup>00</sup>	Registration			
	12 <sup>00</sup>	SP	WC		
	14 <sup>00</sup>	TN	TT		IEEE MTT-S DML
	16 <sup>00</sup>				
	18 <sup>00</sup>				

Session Name		Session mark
Antennas and Propagation		AP
Microwave Technique		MT
Computational Electromagnetics – Autumn Training School COST Action IC1407 ACCREDIT		CEM
Signal Processing		SP
Wireless Communications		WC
Telecommunication Networks		TN
Internet Technologies		IT
Telecommunications Techniques		TT
Broadcasting and Multimedia		BM
Poster	RF & Microwave Techniques, Antennas and Propagation	PO1
	Telecommunication Technologies, Networks and Systems	PO2
	Information and Communications Technologies	PO3
International Professional Conference <i>Development and Implementation of Advanced Cable Services and Effective Business Models</i>		DIACAS 2017
IEEE MTT-S Distinguished Microwave Lecturer Talk		IEEE MTT-S DML

Other Events	Mark
Serbian Cable Operators – Steering Boards Meeting	PUKOS



Wednesday, October 18

Lecture Hall  
10:30

OPENING  
SESSION

Chair

Prof. **Bratislav Milovanović**  
TELSIKS Conference General Chair,  
Serbia

Prof. **Zoya Popović**  
University of Colorado, USA

Prof. **David Thomas**  
University of Nottingham, UK

Prof. **Nebojša Dončov**  
TELSIKS Technical Program Committee  
Chair, Serbia

#### WELCOME TO TELSIS 2017

Prof. **Bratislav Milovanović**  
TELSIKS Conference General Chair, Serbia

Prof. **Nebojša Dončov**  
TELSIKS Technical Program Committee  
Chair, Serbia

Prof. **Vera Marković**  
Serbia and Montenegro IEEE Section Chair,  
Serbia

Prof. **Dragan Janković**  
Dean of the Faculty of Electronic  
Engineering, University of Niš, Serbia

**Darko Bulatović**  
Niš City Mayor, Serbia

**Rasim Ljajić**  
Deputy Prime Minister and Minister of Trade,  
Tourism and Telecommunications of  
Republic of Serbia

12:00

End of session



Wednesday, October 18

Lecture  
Hall  
11:15

PLENARY  
SESSION

Chair

**D. Thomas**  
*University of Nottingham, UK*

**N. Dončov**  
*University of Niš, Serbia*

**Invited paper:**

**PL.1 Near- and Far-Field Wireless Power Transfer**  
Z. Popovic  
*University of Colorado Boulder, USA*

**12:00** End of session



Room A  
14:00

Wednesday, October 18

COMPUTATIONAL  
ELECTROMAGNETICS  
Autumn Training School  
COST Action IC1407 ACCREDIT

Chair

**D. Thomas**  
*University of Nottingham, UK*

**N. Dončov**  
*University of Niš, Serbia*

**B. Kolundžija**  
*University of Belgrade, Serbia*

**J. Russer**  
*Technical University of Munich, Germany*

**Invited papers:**

- CEM.1 Reducing the Complexity of Near-Field Scanning of Stochastic Fields**  
D. Thomas, M. Baharuddin, C. Smartt, G. Gradoni, G. Tanner, S. Creagh  
*University of Nottingham, UK*
- CEM.2 Modeling of Stochastic Electromagnetic Fields**  
J. Russer  
*Technical University of Munich, Germany*
- CEM.3 Efficient 2D Electromagnetic Solution of Scattering from Electrically Large Platform**  
J. Music, D. Olcan\*, B. Kolundžija\*  
*WIPL-D d.o.o., Belgrade, Serbia*  
*\*University of Belgrade, Serbia*

**Regular papers:**

- CEM.4 1D Localization of Highly Correlated Mobile Stochastic EM Sources Using Neural Model**  
Z. Stanković, N. Dončov, I. Milovanović\*, B. Milovanović\*  
*University of Niš, Serbia*  
*\*University Singidunum, Serbia*
- CEM.5 Phase Integral Approach to Wave Propagation in Continuously Graded Models of Flat Lenses**  
M. Dalarsson, Z. Jakšić\*  
*Linnaeus University, Sweden*  
*\*Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia*
- CEM.6 Improving Shielding Effectiveness of a Metallic Enclosure at Resonant Frequencies**  
N. Nešić, B. Milovanović\*, N. Dončov\*\*, S. Rupčić\*\*\*, V. Mandrić-Radivojević\*\*\*  
*College of Applied Technical Sciences, Niš, Serbia*  
*\*University Singidunum, Serbia*  
*\*\*University of Niš, Serbia*  
*\*\*\*University of Osijek, Croatia*

16:00 End of session



Wednesday, October 18

Room B  
14:00

BROADCASTING AND  
MULTIMEDIA

Chair

**D. Drajić**  
*University of Belgrade, Serbia*  
**U. Burnik**  
*University of Ljubljana, Sloveni*  
**J. Joković**  
*University of Niš, Serbia*

**Invited papers:**

**BM.1** **Tesla's Contribution to Radio Engineering**  
D. Drajić  
*University of Belgrade, Serbia*

**Regular papers:**

**BM.2** **Objectives and Performance of H.265/HEVC Video Coding Standard**  
U. Burnik  
*University of Ljubljana, Slovenia*

**BM.3** **Multimedia Broadcasting in Multi-Access Edge Computing**  
E. Pencheva  
*Technical University of Sofia, Bulgaria*

**BM.4** **Virtual Reality Modelling and Simulation of the Tesla's Radio Controlled Boat**  
V. Vučković, A. Stanišić, S. Le Blond\*  
*University of Niš, Serbia*  
*\*University of Bath, UK*

**BM.5** **Influence of the Parameters of the DVB-S/S2 Standards on the Capacity of a Satellite Transponder**  
P. Spalević, B. Jakšić, I. Milovanović\*, M. Veinović\*, M. Petrović  
*University of Priština, Serbia*  
*\*University Singidunum, Serbia*

**BM.6** **One Method of Optimizing an Expert System Using Native Client on a TV Platform**  
L. Erdeljanović, S. Stefanović, N. Veljković, I. Petrović  
*RT-RK Computer Based Systems, Novi Sad, Serbia*

**BM.7** **Android Multimedia Environment Extension with Support for Adaptive Transport Protocol**  
V. Kosjer, N. Popović, N. Fimić, N. Šoškić  
*RT-RK Computer Based Systems, Novi Sad, Serbia*

**BM.8** **Low Memory Consumption DTV (ATSC) Software Solution for Embedded TV Devices**  
M. Ilić, D. Vidaković, J. Filipović  
*RT-RK Computer Based Systems, Novi Sad, Serbia*

**16:00** End of session



Room A  
09:00

Thursday, October 19

ANTENNAS AND  
PROPAGATION

Chair

**A. Skrivervik**

*Ecole Polytechnique Fédérale de Lausanne,  
Switzerland*

**B. Jokanović**

*Institute of Physics Belgrade, Serbia*

Invited papers:

AP.1

**Design Considerations for Implantable and Wearable Antennas**

A. Skrivervik, M. Bosiljevac\*, Z. Sipus\*  
*Ecole Polytechnique Fédérale de Lausanne,  
Switzerland*  
\*University of Zagreb, Croatia

AP.2

**Advances Antennas for Next Generation of Wireless Access**

B. Jokanović, V. Milošević, M. Radovanović\*,  
N. Bošković  
*Institute of Physics Belgrade, Serbia*  
\*University of Belgrade, Serbia

Regular papers:

AP.3

**Fractal Dipole Antennas Based on Hilbert Curves with Different Line-to-Spacing Ratio**

V. Radonić, G. Mišković\*, V. Crnojević-Bengin  
*BioSense Institute, Novi Sad, Serbia*  
\*Technical University Wien, Austria

AP.4

**Compact Efficient UWB Antenna Based on Multiple Slots**

H. Aslani, A. Elkorany\*, A. Radwan\*  
*Polytechnic University of Milan, Italy*  
\*Menofia University, Egypt

AP.5

**Fractal Antenna over EBG Structure for UHF RFID Applications**

A. Slavov, P. Petkov  
*Technical University of Sofia, Bulgaria*

AP.6

**Study of Dielectric Substrate Effect on Modelling CPW-Fed Slot Antenna Arrays**

M. Milijić, A. Nešić\*, B. Milovanović\*\*  
*University of Niš, Serbia*  
\*IMTEL communications, Belgrade, Serbia  
\*\*University Singidunum, Serbia

AP.7

**Propagation of Radio Waves in the Presence of a Combined Tropospheric Duct**

V. Permyakov, M. Mikhailov, Y. Borodko  
*"Moscow Power Engineering Institute", Russia*

11:00

End of session



Room B  
09:00

Thursday, October 19

## INTERNET TECHNOLOGIES

Chair

**Z. Bojković**  
*University of Belgrade, Serbia*  
**A. Jevremović**  
*University Singidunum, Serbia*  
**D. Stojanović**  
*University of Niš, Serbia*

### Invited papers:

- IT.1 Vision and Enabling Technologies of Tactile Internet Realization**  
Z. Bojković, B. Bakmaz, M. Bakmaz  
*University of Belgrade, Serbia*
- IT.2 An Overview of Current Security and Privacy Issues in Modern Telecommunications**  
A. Jevremović, M. Veinović, G. Šimić\*  
*University Singidunum, Serbia*  
\**University of Defense, Belgrade, Serbia*

### Regular papers:

- IT.3 Web Service Interfaces for Intra-Cell Terminal Activity**  
E. Pencheva, I. Atanasov, P. Penchev, V. Trifonov  
*Technical University of Sofia, Bulgaria*
- IT.4 Software Systems for Processing and Analysis of Big Data and Event Streams**  
A. Stojnev, D. Stojanović  
*University of Niš, Serbia*
- IT.5 Packet Interleaving and Its Influence on the VoIP Connection Quality**  
A. Lebl, M. Mileusnić, M. Stanić, D. Mitić, V. Matic, Ž. Markov  
*IRITEL doo Beograd, Serbia*
- IT.6 The Distributed Denial of Service Attacks (DDoS) Prevention Mechanisms on Application Layer**  
K. Bhosale, M. Nenova, G. Iliev  
*Technical University of Sofia, Bulgaria*
- IT.7 An Approach of DNS Protection Against DDoS Attacks**  
I. Georgiev, K. Nikolova  
*Technical University of Sofia, Bulgaria*

11:00

End of session



Room A  
11:00

Thursday, October 19

## MICROWAVE TECHNIQUE

Chair

**Z. Popovic**

*University of Colorado Boulder, USA*

**V. Marković**

*University of Niš, Serbia*

### Invited papers:

**MT.1 Air-Filled Substrate Integrated Waveguide – A Flexible and Low Loss Technological Platform**

A. Ghiotto, F. Parment, T. Martin, T.-P. Vuong\*, K. Wu\*\*

*University of Bordeaux, France*

*\*Grenoble Institute of Technology (INPG), France*

*\*\*Polytechnique Montréal, Canada*

### Regular papers:

**MT.2 Theoretical Comparison Between Calibration Standards Using Straight and Bended CPW's**

K. Hamze, D. Pasquet\*, P. Descamps\*, E. De Ledinghen

*Presto Engineering Europe, France*

*\*Normandie Université ENSICAEN/CRISMAT/*

*UMR, France*

**MT.3 Forward-Wave 0 dB Directional Coupler Based on Microstrip-Ridge Gap Waveguide Technology**

S. Birgermajer, N. Janković, V. Crnojević-Bengin, M. Bozzi\*, V. Radonić

*BioSense Institute, Novi Sad, Serbia*

*\*University of Pavia, Italy*

**MT.4 General Properties of Multistage Bandpass Filters with Antiparallel Configuration**

S. Jovanović, V. Pantović\*, B. Milovanović\*\*

*IMTEL communications, Belgrade, Serbia*

*\*Faculty of Business Economics and*

*Entrepreneurship, Serbia*

*\*\*University Singidunum, Serbia*

**MT.5 Thermal Characterization of High-Power GaN HEMTs up to 65 GHz**

A. Petrocchi, G. Crupi\*, V. Vadalà\*\*, G. Avolio,

A. Raffo\*\*, D. Schreurs, A. Caddemi\*, G. Vannini\*\*

*KU Leuven University, Belgium*

*\*University of Messina, Italy*

*\*\*University of Ferrara, Italy*



**MT.6 Neural Procedure for Microwave MOSFET Modelling Versus Bias and Gate Length**

Z. Marinkovic, G. Crupi\*, D. Schreurs\*\*,  
A. Caddemi\*, V. Marković  
*University of Niš, Serbia*  
\**University of Messina, Italy*  
\*\**KU Leuven University, Belgium*

**MT.7 Modeling and Analysis of the Frequency Dependence of Class-E Outphasing**

P. Brehm, T. Barton  
*University of Colorado Boulder, USA*

**MT.8 An Ultra-Wideband Sensing Board for IoT**

A. Petrocchi, A. Raffo\*, G. Avolio, K. Lukasik,  
D. Resca\*\*, G. Vannini\*, S. Lemey\*\*\*,  
O. Caytan\*\*\*, S. Agneessens\*\*\*, H. Rogier\*\*\*,  
D. Schreurs  
*KU Leuven University, Belgium*  
\**University of Ferrara, Italy*  
\*\**Microwave Electronics for Communications (MEC), Italy*  
\*\*\**University of Ghent, Belgium*

**13:00** End of session



Room A  
10:00

Friday, October 20

SIGNAL PROCESSING

Chair

**Z. Konjović**  
*University Singidunum, Serbia*  
**Z. Perić**  
*University of Niš, Serbia*  
**B. Stošić**  
*University of Niš, Serbia*

**Invited papers:**

**SP.1 Linear Fuzzy Space with Applications**  
Đ. Obradović, Z. Konjović, E. Pap  
*University Singidunum, Serbia*

**Regular papers:**

**SP.2 Chebyshev Polynomials of the Second Kind in Filter Design**  
B. Stošić, V. Pavlović  
*University of Niš, Serbia*

**SP.3 Towards Enabling Measurement of Similarity of Acoustical Environments Using Mobile Devices**  
I. Jokić, S. Jokić\*, V. Delić, Z. Perić\*\*  
*University of Novi Sad, Serbia*  
\*ECG for Everybody, Serbia  
\*\*University of Niš, Serbia

**SP.4 Image Coding Algorithm Based on Modified Block Truncation Coding and Delta Modulation**  
Z. Perić, N. Simić, M. Savić\*  
*University of Niš, Serbia*  
\*University of Priština, Serbia

**SP.5 Design of Switched Quasi-Logarithmic Quantizer for Gaussian Source with Variable Length Codes**  
N. Vučić, Z. Perić, M. Dinčić  
*University of Niš, Serbia*

**SP.6 Nonlinear Anisotropic Diffusion-Based Structural inpainting Framework**  
T. Barbu  
*Romanian Academy, Iasi Branch, Romania*

**SP.7 Feature Extraction and Automatic Detection of Martian Impact Craters from 3D Meshes**  
N. Christoff, A. Manolova, L. Jorda\*, J.-L. Mari\*  
*Technical University of Sofia, Bulgaria*  
\*Aix-Marseille Université(CNRS), France

12:00 End of session



Friday, October 20

Room B  
10:00

## WIRELESS COMMUNICATIONS

Chair

**F. Franco**

*University of Extremadura, Spain*

**N. Maleš-Ilić**

*University of Niš, Serbia*

**V. Kafedziski**

*Ss Cyril and Methodius University, Macedonia*

### Invited papers:

- WC.1 High Accuracy APS for Unmanned Aerial Vehicles**  
F. Franco, J. Esteban, J. Villadangos\*  
*University of Extremadura, Spain*  
\**University of Alcalá, Spain*

### Regular papers:

- WC.2 A New Block-Structure Modeling Technique for RF Power Amplifiers in a  $2 \times 2$  MIMO System**  
M. Alizadeh, D. Rönnow, P. Händel\*, M. Isaksson  
*University of Gävle, Sweden*  
\**Royal Institute of Technology (KTH), Sweden*
- WC.3 Base Station Transmission Power Optimization in Interference-Limited Cellular Networks for Maximum Energy Efficiency**  
S. Bandopadhyaya, S. Samal\*, S. Dora\*\*, V. Poulkov\*  
*BML Munjal University, India*  
\**Technical University of Sofia, Bulgaria*  
\*\**Silicon Institute of Technology, Odisha, India*
- WC.4 Performance Evaluation of Throughput Averaging Methods for the Proportional Fair Algorithm in Indoor Mobile Networks**  
V. Stoyanov, Z. Valkova-Jarvis  
*Technical University of Sofia, Bulgaria*
- WC.5 Implementation of a High Resolution Stepped Frequency Radar on a USRP**  
V. Kafedziski, S. Pecov  
*Ss Cyril and Methodius University, Macedonia*
- WC.6 Outage Probability of Energy Harvesting DF Relay Systems in Generalized-K Fading**  
V. Blagojević, A. Cvetković\*  
*University of Belgrade, Serbia*  
\**University of Niš, Serbia*
- WC.7 Analysis of Possible Wi-Fi Interferences of Wireless Communications Implemented in Vehicular Environments**  
R. Gheorghiu, V. Iordache, I. Badescu  
*University Politehnica of Bucharest, Romania*
- WC.8 Field Testing of Bluetooth and ZigBee Technologies for Vehicle-to-Infrastructure Applications**  
R. Gheorghiu, V. Iordache, M. Minea, A. Cormos  
*University Politehnica of Bucharest, Romania*

12:00

End of session



Friday, October 20

Room A  
12:00

TELECOMMUNICATION  
NETWORKS

Chair

**L. Gavrilovska**

*Ss Cyril and Methodius University, Macedonia*

**T. Korakis**

*University of Thessaly, Greece*

**Invited papers:**

**TN.1 Flexible C-RAN: Radio Technology for 5G**

L. Gavrilovska, V. Rakovic, A. Ichkov,  
D. Todorovski, S. Marinova  
*Ss Cyril and Methodius University, Macedonia*

**TN.2 Flexible Cross-Technology Offloading Using SDN**

C. Zarafetas, N. Makris, A. Apostolaras, T. Korakis,  
L. Tassiulas\*  
*Centre for Research and Technology Hellas and  
University of Thessaly, Greece,  
\*Yale University, USA*

**Regular papers:**

**TN.3 On the Development of Energy-Efficient Communications for Marine Monitoring Deployments**

G. Kazdaridis, P. Symeonidis, I. Zographopoulos,  
T. Korakis, K. Klun\*, N. Kovac\*  
*University of Thessaly, Greece  
\*National Institute of Biology, Slovenia*

**TN.4 Neural Network Routing Implementation Using CUDA Technology**

S. Zoican, R. Zoican, D. Galatchi  
*University Politehnica of Bucharest, Romania*

**TN.5 Cost Analysis of Provider's Partial Cloud Migration**

B. Mikavica, A. Kostić-Ljubisavljević,  
V. Radonjić-Đogatović  
*University of Belgrade, Serbia*

**TN.6 Load Balanced Birkhoff-von Neumann Switch with Output Congestion Detection**

S. Đurković, Z. Čiča  
*University of Belgrade, Serbia*

**TN.7 On the Usability of Bluetooth in V2I Based Communications for Extended Infrastructure Support**

R. Gheorghiu, M. Minea, V. Iordache  
*University Politehnica of Bucharest, Romania*

14:00

End of session



Friday, October 20

Room B  
12:00

TELECOMMUNICATIONS  
TECHNIQUES

Chair

**B. Vasic**  
*University of Arizona, USA*

**I. Djordjevic**  
*University of Arizona, USA*

**P. Ivaniš**  
*University of Belgrade, Serbia*

**Invited papers:**

- TT.1** **Multidimensional Coded Modulation for Wireless Communications Beyond 5G**  
I. Djordjevic, S. Zhang\*, T. Wang\*  
*University of Arizona, USA*  
*\*NEC Laboratories America, Inc., USA*
- TT.2** **Stochastic Resonance in Iterative Decoding: Message Passing and Gradient Descent Bit Flipping**  
P. Ivaniš, S. Brkić, B. Vasic\*  
*University of Belgrade, Serbia*  
*\*University of Arizona, USA*
- TT.3** **Generic Architectures for Uniformly Reweighted APP Decoders**  
V. Ilić, E. Dupraz\*, B. Vasic\*\*  
*Mathematical Institute of the Serbian Academy of Sciences and Art, Serbia*  
*\*ITM Atlantique, France*  
*\*\*University of Arizona, USA*

**Regular papers:**

- TT.4** **OAM-Based Physical-Layer Security Enabled by Hybrid Free-Space Optical-Terahertz Technology**  
I. Djordjevic, S. Zhang\*, T. Wang\*  
*University of Arizona, USA*  
*\*NEC Laboratories America, Inc., USA*
- TT.5** **Real-Time Adaptive LDPC Coded APSK for Aeronautical Telemetry**  
D. Zou, I. Djordjevic  
*University of Arizona, USA*
- TT.6** **Analytical Approach in Evaluation of Outage Probability of DF Based Hybrid Satellite-Terrestrial FSO Cooperative System**  
M. Petković, G. Đorđević\*, Z. Marjanović\*  
*University of Novi Sad, Serbia*  
*\*University of Niš, Serbia*

**14:00** End of session



Wednesday, October 18

Room D  
16:00

Poster session – PO1–  
RF & MICROWAVE  
TECHNIQUES, ANTENNAS AND  
PROPAGATION

Chair

**O. Pronić-Rančić**  
*University of Niš, Serbia*

**V. Stornelli**  
*University of L'Aquila, Italy*

**Regular papers:**

**PO1.1 VHF Quadrature Hybrid Coupler with the Crossed Strips**  
V. Crnadak, S. Tasić\*  
*University of Belgrade and IMTEL communications, Serbia*  
*\*IMTEL communications, Belgrade, Serbia*

**PO1.2 Bandpass Filter Design with Active Inductor by Means of Wave Digital Approach**  
A. Leoni, L. Pantoli, G. Leuzzi, V. Stornelli, B. Stošić\*  
*University of L'Aquila, Italy*  
*\*University of Niš, Serbia*

**PO1.3 An Approach for AI-Based Filters Design by Means of Neural Networks**  
A. Leoni, L. Pantoli, Z. Marinkovic\*, V. Stornelli, G. Leuzzi  
*University of L'Aquila, Italy*  
*\*University of Niš, Serbia*

**PO1.4 Multi-Bias Equivalent Circuit for MOSFET Modelling**  
G. Crupi, Z. Marinkovic\*, D. Schreurs\*\*, V. Marković\*, A. Caddemi  
*University of Messina, Italy*  
*\*University of Niš, Serbia*  
*\*\*KU Leuven University, Belgium*

**PO1.5 Wave Approach to Noise Modeling of Scaled On-Wafer GaAs HEMTs**  
V. Đorđević, E. Cardillo\*, Z. Marinkovic\*\*, O. Pronić-Rančić\*\*, A. Caddemi\*, V. Marković\*\*  
*Innovation Centre of Advanced Technologies (ICAT), Niš, Serbia*  
*\*University of Messina, Italy*  
*\*\*University of Niš, Serbia*

**PO1.6 Controlled Coefficient Adaptation in Linearization of PA by Modified Baseband Signal**  
A. Atanasković, N. Maleš-Ilić, A. Đorić\*  
*University of Niš, Serbia*  
*\*Innovation Centre of Advanced Technologies (ICAT), Niš, Serbia*

- PO1.7** **Contribution to the Electrostatic Analysis of Bliotropic Mediums of Tellegen Type**  
Ž. Mančić, S. Ilić  
*University of Niš, Serbia*
- PO1.8** **Consideration of TLM Modelling on Example of Cylindrical Rectangular Microstrip Antenna Modelling**  
T. Dimitrijević, J. Joković, N. Dončov,  
B. Milovanović\*, M. Kostić  
*University of Niš, Serbia*  
*\*University Singidunum, Serbia*  
*\*\*Innovation Centre of Advanced Technologies*
- PO1.9** **Strip Horn for Operation at 9-15 GHz Range**  
N. Popović, P. Manojlović  
*IMTEL communications, Belgrade, Serbia*
- PO1.10** **A Novel Method for Calculating Radiation Patterns of Phased Array Antennas with an Increased Interelement Spacing**  
V. Gusevsky, A. Klementyeva, A. Komarov  
*"Moscow Power Engineering Institute", Russia*

**18:00** End of session



Wednesday, October 18

Room D  
16:00

Poster session – PO2-  
TELECOMMUNICATION  
TECHNOLOGIES, NETWORKS  
AND SYSTEMS

Chair

**D. Milić**  
*University of Niš, Serbia*

**A. Panajotović**  
*University of Niš, Serbia*

**Regular papers:**

**PO2.1 Performance of Multi-Hop Relaying Networks with SSC Diversity at the Destination**

A. Panajotović, N. Sekulović\*, A. Cvetković,  
D. Milović  
*University of Niš, Serbia*  
*\*College of Applied Technical Sciences, Niš, Serbia*

**PO2.2 Outage and Ergodic Capacity Analysis of Wireless Networks with Selfish Cooperation**

A. Cvetković, J. Anastasov, D. Milović, D. Milić,  
Z. Marjanović  
*University of Niš, Serbia*

**PO2.3 Performance Monitoring Challenges in HFC Networks**

M. Simaković, I. Masnikosa, Z. Čiča  
*University of Belgrade, Serbia*

**PO2.4 Laboratory Model of Stepped Frequency Continuous Wave Radar**

G. Antonijević, S. Simić\*  
*The Army of Serbia, 126th brigade, Serbia*  
*\*University of Defence, Belgrade, Serbia*

**PO2.5 SIR Based LCR Performance Analysis of Hybrid SC Diversity Reception in Mobile Wireless Networks over Composite Fading Channel**

Č. Stefanović, D. Došić, M. Simonović, D. Milić,  
V. Milenković, M. Stefanović  
*University of Niš, Serbia*

18:00 End of session





Wednesday, October 18

Room D  
16:00

Poster session – PO3–  
INFORMATION AND  
COMMUNICATIONS  
TECHNOLOGIES

Chair

**Z. Jovanović**  
*University of Niš, Serbia*

**M. Andrejević-Stošović**  
*University of Niš, Serbia*

**Regular papers:**

**PO3.1 Heuristic-Modified Region Filling Algorithms for A-B Connection Searching Problem**  
V. Vučković, B. Arizanović  
*University of Niš, Serbia*

**PO3.2 Security Point of View of Asp.Net Application**  
M. Medenica, Đ. Dihovični  
*Technical College, Belgrade, Serbia*

**PO3.3 Expanding Lua Interface to Support HTTP/HTTPS Protocol**  
I. Stanivuk, V. Bjelić\*, T. Samardžić\*, Đ. Simić\*  
*University of Novi Sad, Serbia*  
*\*RT-RK Computer Based Systems, Novi Sad, Serbia*

**PO3.4 Implementation of User Settings Control with Lua C API**  
M. Berić, V. Bjelić\*, Đ. Simić\*, N. Fimić\*  
*RT-RK Computer Based Systems, Banja Luka, Bosnia&Herzegovina*  
*\*RT-RK Computer Based Systems, Novi Sad, Serbia*

**PO3.5 Comparison Analysis of Standard Disk Partitioning and LVM Based Disk Partitioning on Linux Systems**  
M. Bozić, M. Đukić, D. Narančić, I. Pap  
*RT-RK Computer Based Systems, Novi Sad, Serbia*

**PO3.6 One Solution for the Weight Measurement Process Update Using Embedded Computer**  
M. Đukić, P. Jelić, M. Bulajić, D. Narančić  
*RT-RK Computer Based Systems, Novi Sad, Serbia*

**PO3.7 Implementation of DTV User Interaction Concept with Content Recommendations**  
P. Petrović, N. Vranić, M. Lutovac-Banduka, V. Mihić  
*RT-RK Computer Based Systems, Novi Sad, Serbia*

- PO3.8 Testing of FlexRay Communication and Error Processing Using Dedicated Tools in Automotive Industry**  
 U. Jović, N. Lajić\*, D. Ačanski\*, D. Spasojević\*  
*University of Novi Sad, Serbia*  
 \*RT-RK Computer Based Systems, Novi Sad, Serbia
- PO3.9 Process Schedule Optimisation According to Event Chains on Automotive Embedded Platforms**  
 A. Korać, V. Ilić, N. Kovačić, D. Samardžija, B. Pavković  
*RT-RK Computer Based Systems, Novi Sad, Serbia*
- PO3.10 Validation of Process Execution on Automotive Embedded Devices**  
 N. Kovačić, V. Ilić, A. Korać, A. Zejak, B. Pavković  
*RT-RK Computer Based Systems, Novi Sad, Serbia*
- PO3.11 Synthesis of the Proportional Integral Controller for a Non-Minimum Phase High Order System by Using the Lambert W Function**  
 Z. Jovanović, R. Gerov\*  
*University of Niš, Serbia*  
 \*School of Agriculture with a student's dormitory Rajko Bosnić, Serbia
- PO3.12 Monitoring and Classification of Nonlinear Loads Based on Artificial Neural Networks**  
 M. Andrejević-Stošović, D. Stevanović\*, M. Dimitrijević  
*University of Niš, Serbia*  
 \*Innovation Centre of Advanced Technologies (ICAT), Niš, Serbia
- PO3.13 An Application of Dental X-ray Image Enhancement**  
 V. Georgieva, A. Mihaylova, P. Petrov  
*Technical University of Sofia, Bulgaria*
- PO3.14 Analysis of Calibration and Verification Indirect Methods of Ultrasonic Flowmeters**  
 S. Gerasimov, V. Glushnev, N. Serov  
 "Moscow Power Engineering Institute", Russia
- PO3.15 Comments on Objective Quality Assessment of JPEG Images with Visible Differences**  
 B. Bondžulić, B. Pavlović, M. Andrić, V. Petrović\*  
*University of Defence in Belgrade, Serbia*  
 \*University of Novi Sad, Serbia

**18:00** End of session



Thursday, October 19

Room C  
11:00

International Professional  
Conference - DIACAS 2017

### **Development and implementation of advanced cable services and effective business models-DIACAS**

*Conference will be held in Serbian.*

#### **Topics:**

1. "Copyright, related and licensing rights - requirements and realities in the market Telecommunications in Serbia"
2. „Financial models for redistribution of media content - the situation in Serbia and experiences from countries in the region
3. "Objectives and activities of the International Commission of the Cable Operators Association of the Countries of South-East Europe"

International expert meeting DIACAS organized by the PUKOS (Cable Operators Association of Serbia-COAS), and the Serbian National Association for Microwave Technique, Technologies and Systems (MTTS-Association) which is the co-organizer of the international IEEE scientific Conference - TELSIKS 2015 will be held on October 18 and 19, 2017 at the Faculty of Electronic Engineering in Nis, Serbia.

The aim of this international expert meeting is to review the current state of cable services development in Serbia and the region, and to analyze the financial models in the implementation of copyright and redistribution of media content through a constructive exchange of experience, as well as to determine the essential problems in operating and implementing new services. As the main result, the identification of solutions that will enable better business environment of the cable operators and increase the quantity and quality of services is expected. The goal is to establish a long-running international conference focusing on relevant contents and topics of interest in this field.

#### **Subtopics:**

1. "Copyright, related and licensing rights - requirements and realities in the market Telecommunications in Serbia"

Speakers: Vladimir Milosavljević, Miroslav Stanojević,

2. „Financial models for redistribution of media content - the situation in Serbia and experiences from countries in the region

Speakers: Andrija Bednarik, Vladimir Milosavljević

3. "Objectives and activities of the International Commission of the Cable Operators Association of the Countries of South-East Europe"

Speakers: Andrija Bednarik, Representative of the Cable Operators Association of Slovenia

#### **Moderators:**

Prof. Dr. Bratislav Milovanović, President of the Assembly of the PUKOS,  
Andrija Bednarik, Chair of the PUKOS Board,  
Miroslav Stanojević, Secretary of PUKOS Society  
Vladimir Milosavljević, Vice Chair of the PUKOS Board

#### **Participants**

1. PUKOS members, representatives of other cable operators and Internet providers
2. Representatives of CATV associations from the neighboring countries
3. Telekom, PE Post of Serbia, SBB
4. Representatives of the Ministries of the Government of the Republic of Serbia, Serbian Regulatory Agency for Electronic Communications and Postal Services, Regulatory Authority of Electronic Media of the Republic of Serbia, Intellectual Property Office of the Republic of Serbia, Serbian Author Agency, Serbian Music Authors' Organization, etc.
5. Representatives of broadcasters,
6. Exhibitors (representatives of the manufactures of CATV equipment, representatives of the broadcast copyrights)

#### **Conference program for the invited participants**

##### **Wednesday, 18/10/2017**

10:30h

Opening ceremony of the IEEE International Conference TELSIS 2017

11.15h

Plenary talking: Prof. dr Zoya Popović, University of Colorado BBB, Boulder, USA "Near- and Far-Field Wireless Power Transfer"

12.00h

Forum of Advanced Technologies, ([www.forumnt.rs](http://www.forumnt.rs))

20.00h

Dinner (Host: JOTEL and POGLED)

##### **Thursday, 19/10/2017**

09:30-10.45h PUKOS Board Meeting

11:00-13:30h International expert meeting-forum DIACAS 2017

14:00-16:00h Lunch, Restaurant BISER

20:30-01:00h TELSIS gala dinner (for COAS Board Members)

For further information, please contact:  
[batam@pogled.net](mailto:batam@pogled.net) i [andrija.bednarik@radiusvektor.rs](mailto:andrija.bednarik@radiusvektor.rs)

**14:00** End of session



#### LEGEND

1. City Centre
2. Hotel My Place\*\*\*\*
3. Hotel Niški Cvet\*\*\*\*
4. Niš City Hall
5. Hotel Aleksandar\*\*\*
6. Hotel Extra Lion MD\*\*\*
7. Faculty of Electronic Engineering
8. University of Niš
9. Airport
10. Fortress
11. Railway station
12. Bus station
13. Niška Banja
14. Hotel Vidikovac \*\*\*
15. Concert Hall of the Faculty of Arts
16. Hotel DuoD \*\*\*

EF – Faculty of Electronic Engineering