20th International Symposium on Power Electronics - Ee2019

Venue: University of Novi Sad - Central Building, Novi Sad, Serbia

FInalni Program / Final Program

Updated: Oct. 19, 2019

Wednesday, 23 Oct. 2019.

	PRE-CONFERENCE EVENTS	
10:00 - 11:45h	**IEEE PELS/IES/IAS Jt. Chapter Meeting:**	**FTS-Ceremonial Hall**
10:00 - 10:45h	**Prof. KRISHNA SHENAI, Distinguished lecturer of the IEEE PELS** University of Chicago, Chicago, Illinois, USA "Reliability of Compact Power Systems"	**FTS-Ceremonial Hall**
10:45 - 11:00h	**Refreshment**	
11:00 - 11:45h	**Prof. PETAR GRBOVIC, Distinguished lecturer of the IEEE PELS** University of Innsbruck, Innsbruck, Austria "Multi-Cell & Multi-Level Power Converters -A Way to Go Beyond the Limits of Si"	**FTS-Ceremonial Hall**
	Ee 2019 TUTORIALS:	
12:00 - 15:00h	**Tutorials Registration // HARD & SOFT Student Competition (Preliminaries)**	**FTS-Ceremonial Hall**
13:00 - 13:30h	**OPENING - Tutorials // Hard&Soft Student Competition**	**FTS-Ceremonial Hall**
13:30 - 18:00h	**Tutorial 1 (Refreshment in hall)** **Mr. Darko Vračar,** Brusa Elektronik (München) GmbH, Munich, Germany "Development of power electronics` systems - From blank sheet to mass production and beyond"	**FTS-Kula, 3rd Floor, Room 301 // FTS-ITC, 3rd Floor Amphiteater**
13:30 - 18:00h	**Tutorial 2 (Refreshment in hall)** **Prof. Drazen Dujic and Stefan Milovanovic** Power Electronics Laboratory – PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland "Modular Multilevel Converters – Operating Principles and Applications"	**FTS-Ceremonial Hall**
18:30 - 20:30h	**BEER PARTY (NS Craft Beers)**	
	CONFERENCE	

Time	Paper Id	Session	Paper title / Authors:family name	Authors: name	Affiliation	State
Thursday, 24 Oct. 2019.						
09:00 - 18:30h			**HARD & SOFT Student Competition (Preliminaries)**		**FTS-Reading Hall**	
09:00 - 18:30h			**REGISTRATION**			
09:30h	**PLENARY**	**Session**	**OPENING CEREMONY**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
		Co-chair:	**Prof. Dražen Dujić, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**			
		Co-chair:	**Dr. Dragan Kovačević, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
			- Opening **- Music** **- Greetings**			

10:00h	**PLENARY Session - KN1**		**KEY-NOTE PAPERS**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
		Co-chair:	**Prof. Dražen Dujić, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**			
10:00h		**KN1-1**	**The renewables integration via HVDC grids**			
			Bacha	Seddik	Grenobles Alpes University / G2Elab and Supergrid Institute, Grenoble/Lion	France
10:40h		**KN1-2**	**Highly efficient and robust direct modular multilevel converters for grid-connected applications**			
			Vasiladiotis	Michail	ABB Switzerland, Turgi	Switzerland
11:20 - 11:30h			**REFRESHMENT BREAK**			
11:30h	**PLENARY Session - IP1**		**INVITED PAPERS**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Dr. Dušan Graovac, Infineon Technologies, Germany**			
		Co-chair:	**Assc.Prof. Marko Vekić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
11:30h	07126	**IP1-1**	**Spread Spectrum Modulation for LCL Filter Design**			
			Park	Ki-Bum	ABB Corporate Research	Switzerland
			Klaus	Pascal	Ecole Polytechnique Federale de Lausanne (EPFL)	Switzerland
			Burkart	Ralph	ABB Corporate Research	Switzerland
12:00h	07426	**IP1-2**	**Non-Fourier fundamental components for the mitigation of waveform distortions**			
			Djokic	Sasa	University of Edinburg, School of Engineering	United Kingdom
			Iqbal	Zafar	University of Edinburg, School of Engineering	United Kingdom
12:30h - 13:30h			**LUNCH BREAK**			
13:30h	**INDUSTRY SESSION**		**Presentations - 1**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Assc.Prof. Boris Dumnić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
		Co-chair:	**Asst.Prof. Vladimir Rajs, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
			Continental			Serbia
			Wolkabout			Serbia
			Typhoon HIL			Serbia
15:00h	**SESSION -T1.1**		**POWER CONVERTERS AND DEVICES**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Dr. Žarko Janda, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
		Co-chair:	**Assc.Prof. Stevan Grabić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
15:00h	00726	**T1.1-1**	**Improved Heat Dissipation Through Copper Bricks for High Turns Ratio Planar Transformers**			
			Winter	Christian	Bergische Universität Wuppertal	Germany
			Riedel	Jan	Robert Bosch GmbH	Germany
			Butzmann	Stefan	Bergische Universität Wuppertal	Germany
15:15h	00826	**T1.1-2**	**Modified Synchronous Reference Frame Based Hysteresis Current Controller**			
			Stojic	Djordje	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
			Veinovic	Slavko	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
			Milinkovic	Milan	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
15:30h	00926	**T1.1-3**	**Eigenvalue study of torsional interactions bewteen Gravelines generator and IFA2000 HVDC**			
			Kovacevic	Stefan	University of Aberdeen	United Kingdom
			Jovcic	Dragan	University of Aberdeen	United Kingdom
			Despouys	Olivier	RTE, Paris	France
			Rault	Pierre	RTE, Paris	France
15:45h	01326	**T1.1-4**	**Efficiency-based power MOSFETs sizeoptimization method for DC–DC buck converters**			
			Wang	Wanjin	Fuzhou University, College of Physics and Information Engineering	China
			Wei	Rongshan	Fuzhou University, College of Physics and Information Engineering	China
			Yin	Yadong	Fuzhou University, College of Physics and Information Engineering	China
16:00h	01826	**T1.1-5**	**Optimum Leakage Inductance Determination for a Q2L-Operating MMC-DAB with Different Transformer Winding Configurations**			
			Alikhanzadeh	Babak	Chalmers University of Technology	Sweden
			Thiringer	Torbjörn	Chalmers University of Technology	Sweden
			Kharezy	Mohammad	Research Institutes of Sweden	Sweden

16:15h	01426	**T1.1-6**	**New Adaptive Control Scheme to Reduce THD in Bidirectional Three-Phase Inverter Using a Three-Phase Unfolder for the Grid Forming Operation**			
			Çelebi	Mehmet	Harran University	Turkey
			Warren Chen	Weilun	Utah State University	United States
			Zane	Regan	Utah State University	United States
15:00h	**SESSION T4.1**		**CONTROL AND MESUREMENT IN POWER ELECTRONICS**		**Central builidng UNS-HALL 1**	
		Chair:	**Prof. Seddik Bacha, G2Elab, Grenoble INP, France**			
		Co-chair:	**Prof. Predrag Pejović, University of Belgrade, School of Electrical Engineering, Belgrade, Serbia**			
15:00h	03126	**T4.1-1**	**An Enhanced Phase-Locked Loop with Extended State Observer**			
			Guo	Baoling	G2Elab, Grenoble INP	France
			Bacha	Seddik	G2Elab, Grenoble INP/Supergrid Institute	France
			Alamir	Mazen	GIPSA-lab, Grenoble INP	France
			Boudinet	Cédric	G2Elab, Grenoble INP	France
			Mesnage	Hugo	Supergrid Institute	France
15:15h	04426	**T4.1-2**	**Replotting the Nyquist Plot - A New Visualization Proposal**			
			Pejovic	Predrag	University of Belgrade, School of Electrical Engineering	Serbia
15:30h	06426	**T4.1-3**	**Critical current of HTS 2G tape operating under high-frequency triangular wave current with DC bias**			
			Lasek	Pawel	Silesian University of Technology, Faculty of Electrical Engineering	Poland
			Michalak	Jaroslaw	Silesian University of Technology, Faculty of Electrical Engineering	Poland
			Stepien	Mariusz	Silesian University of Technology, Faculty of Electrical Engineering	Poland
15:45h	06526	**T4.1-4**	**Investigation of The Effects of Current Measurement Methods on Servo Motor Dynamics**			
			Olca	Yeda	Akim Metal R&D Center	Turkey
			Ekim	Melih Nafi	Akim Metal R&D Center	Turkey
			Boz	Ali Fuat	Sakarya University of Applied Science	Turkey
16:00h	06826	**T4.1-5**	**Heating of Current Conducting Aluminum Wire**			
			Kasaš-Lažetić	Karolina	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Mijatović	Gorana	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Herceg	Dejana	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Kljajić	Dragan	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Krstajić	Marko	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Prša	Miroslav	University of Novi Sad, Faculty of Technical Sciences	Serbia
16:30 - 16:45h			**REFRESHMENT BREAK**			
16:45h	**SESSION -T1.2**		**POWER CONVERTERS AND DEVICES**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Dr. Vladimir Vukić, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
		Co-chair:	**Stefan Milovanović, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**			
16:45h	02126	**T1.2-1**	**Practical Design Considerations of Inductor AC Resistance Calculation Methods**			
			Szczerba	Piotr	Fideltronik Poland R&D Centre	Poland
			Ligenza	Slawomir	Fideltronik Poland R&D Centre	Poland
			Trojan	Pawel	Fideltronik Poland R&D Centre	Poland
			Worek	Cezary	AGH Univ. of Science and Technology, Fac. of Computer Science, Electronics andTelecomm.	Poland
17:00h	04526	**T1.2-2**	**Comparison of two Modular Multilevel Converter Internal Energy Balancing Methods**			
			Basić	Miodrag	Ecole Polytechnique Federale de Lausanne (EPFL), Power Electronics Laboratory (PEL)	Switzerland
			Milovanović	Stefan	Ecole Polytechnique Federale de Lausanne (EPFL), Power Electronics Laboratory (PEL)	Switzerland
			Dujić	Dražen	Ecole Polytechnique Federale de Lausanne (EPFL), Power Electronics Laboratory (PEL)	Switzerland
17:15h	02426	**T1.2-3**	**In-Depth Analysis of Static Current Sharing of Hard-Paralleled 1.7kV 700A SiC MOSFET LinPak Power Modules**			
			Burkart	Ralph Mario	ABB Corporate Research Switzerland	Switzerland
			Bahmani	Amin	ABB Corporate Research Switzerland	Switzerland
			Kieferndorf	Frederick	ABB Corporate Research Switzerland	Switzerland
			Grecki	Filip	ABB Corporate Research Switzerland	Switzerland
			Park	Ki-Bum	ABB Corporate Research Switzerland	Switzerland
			Canales	Francisco	ABB Corporate Research Switzerland	Switzerland

17:30h	02526	**T1.2-4**	**Investigating The Effect of Environmental Parameters On The Reliability Of Power Supplies For Induction Heating Techologies**			
			Prodanov	Prodan	Technical University of Gabrovo	Bulgaria
			Dankov	Dobroslav	Technical University of Gabrovo	Bulgaria
17:45h	02626	**T1.2-5**	**NPC assessment in insulated DC/DC converter topologies using SiC MOSFETs for Power Electronic Traction Transformer**			
			Stackler	Caroline	SuperGrid Institute	France
			Fouineau	Alexis	SuperGrid Institute/Ampère laboratory	France
			Ladoux	Philippe	LAPLACE	France
			Morel	Florent	SuperGrid Institute	France
			Wallart	François	SuperGrid Institute	France
			Dworakowski	Piotr	SuperGrid Institute	France
			Evans	Nathan	SuperGrid Institute	France
18:00h	03026	**T1.2-6**	**A Modular and Scalable Power Electronics Device for the Control of Electric Drives**			
			Ulmer	Sabrina	Reutlingen University	Germany
			Schullerus	Gernot	Reutlingen University	Germany
			Sönmez	Ertugrul	Reutlingen University	Germany
18:15h	04326	**T1.2-7**	**Design and Realization Of a Three-Phase UPS Inverter Capable Of AC Motor Load Support**			
			Ninković	Predrag	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
			Lukić	Milan	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
			Mijailović	Nemanja	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
			Ćirić	Zoran	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
18:30h	03226	**T1.2-8**	**The importance of non-active power in choosing power electric drive**			
			Mirchevski	Slobodan	Univ. “Ss Cyril and Methodius” Skopje, Fac. of Electrical Engineering and Information Technologies	North Macedonia
			Vidanovski	Dragan	JSC “North Macedonian Power Plants”, REK Bitola	North Macedonia
			Digalovski	Mihail	Univ. “Ss Cyril and Methodius” Skopje, Fac. of Electrical Engineering and Information Technologies	North Macedonia
			Rafajlovski	Goran	Univ. “Ss Cyril and Methodius” Skopje, Fac. of Electrical Engineering and Information Technologies	North Macedonia
16:45h	**SESSION T7.1**		**RENEWABLE AND DISTRIBUTED ENERGY SOURCES**		**Central builidng UNS-HALL 1**	
		Chair:	**Assoc.Prof. Saša Mujović, University of Montenegro, Faculty of Electrical Engineering, Podgorica, Montenegro**			
		Co-chair:	**Asst.Prof. Ivan Todorović, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
16:45h	00426	**T7.1-1**	**Fixed-Duty-Cycle Control of a Quasi-Z-Source Inverter in a Battery-Assisted Photovoltaic System**			
			Grgić	Ivan	Univ. of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture	Croatia
			Bašić	Mateo	Univ. of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture	Croatia
			Vukadinović	Dinko	Univ. of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture	Croatia
			Bubalo	Matija	Univ. of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture	Croatia
17:00h	04026	**T7.1-2**	**Application of Repetitive Ripple Estimator in Synchronization of Three Phase Grid Tie Inverters**			
			Filipović	Filip	University of Nis, Faculty of Electronic Engineering	Serbia
			Petronijević	Milutin	University of Nis, Faculty of Electronic Engineering	Serbia
			Mitrović	Nebojša	University of Nis, Faculty of Electronic Engineering	Serbia
			Banković	Bojan	University of Nis, Faculty of Electronic Engineering	Serbia
			Kostić	Vojkan	University of Nis, Faculty of Electronic Engineering	Serbia
17:15h	04726	**T7.1-3**	**Electric vehicles as a mean for peak power curtailment in micro grids**			
			Kontic	Mico	Crnogorski elektroprenosni sistem	Montenegro
			Mujovic	Sasa	University of Montenegro, Faculty of Electrical Engineering	Montenegro
			Calasan	Martin	University of Montenegro, Faculty of Electrical Engineering	Montenegro
17:30h	05526	**T7.1-4**	**Impact of optimal ESS allocation in IEEE 24-test bus system on total production cost**			
			Lukačević	Ognjen	University of Montenegro, Faculty of Electrical Engineering	Montenegro
			Ćalasan	Martin	University of Montenegro, Faculty of Electrical Engineering	Montenegro
			Mujović	Saša	University of Montenegro, Faculty of Electrical Engineering	Montenegro
17:45h	06126	**T7.1-5**	**Simulation-Based Energy Assessment of PV Systems Installed in an Urban Environment**			
			Zeljković	Čedomir	University of Banja Luka, Faculty of Electrical Engineering	Bosnia and Herzegovina
			Mršić	Predrag	University of Banja Luka, Faculty of Electrical Engineering	Bosnia and Herzegovina
			Erceg	Bojan	University of Banja Luka, Faculty of Electrical Engineering	Bosnia and Herzegovina

18:00h	06726	**T7.1-6**	**Enabling Grid Voltage Support Using the Electric Vehicles' Storage**			
			Isakov	Ivana	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Todorović	Ivan	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Katić	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Grabić	Stevan	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Stanisavljević	Aleksandar	University of Novi Sad, Faculty of Technical Sciences	Serbia
18:15h	07226	**T7.1-7**	**Testing of the low speed salient pole synchronous generator for renewable energy sources**			
			Vujkov	Barbara	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Katic	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Dumnic	Boris	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Milicevic	Dragan	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Vukajlovic	Nikola	University of Novi Sad, Faculty of Technical Sciences	Serbia
18:45h - 20:30h			**WELCOME RECEPTION**			

Friday, 25 Oct. 2019.

08:00 - 12:30h			**HARD & SOFT Student Competition (Preliminaries)**		**FTS-Reading Hall**	
09:00 - 18:30h			**REGISTRATION**			
09:00h	**PLENARY Session - KN2**		**KEY-NOTE PAPERS**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
		Co-chair:	**Prof. Darko Marčetić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
09:00h		**KN2-1**	**Mega trends of automotive electronics and their Influence onsemiconductors, power electronics and drives**			
			Graovac	Dusan	Infineon Technologies	Germany
09:40h		**KN2-2**	**Requirements for highly dynamic PHiL converter systems**			
			Hiller	Marc	University of Karlsruhe	Germany
10:20h	**SESSION -T1.3**		**POWER CONVERTERS AND DEVICES**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Darko Marčetić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
		Co-chair:	**Dr. Djordje Stojić, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
10:20h	03326	**T1.3-1**	**Impact of the arm resistance and inductance on thePQ diagram of a modular multilevel converter**			
			Dzonlaga	Bogdan	CentraleSupélec, Univ. Paris-Sud, Université Paris-Saclay, Sorbonne Université	France
			Quéval	Loïc	CentraleSupélec, Univ. Paris-Sud, Université Paris-Saclay, Sorbonne Université	France
			Vannier	Jean-Claude	CentraleSupélec, Univ. Paris-Sud, Université Paris-Saclay, Sorbonne Université	France
10:35h	03826	**T1.3-2**	**Miniaturized Planar Transformer Embedded in Ferrite Substrate for Isolated High- Frequency Low-Power Applications**			
			Dinulovic	Dragan	Würth Elektronik eiSos GmbH & Co. KG	Germany
			Shousha	Mahmoud	Würth Elektronik eiSos GmbH & Co. KG	Germany
			El Shafey	Khaled	Würth Elektronik eiSos GmbH & Co. KG	Germany
			Haug	Martin	Würth Elektronik eiSos GmbH & Co. KG	Germany
10:50h	06226	**T1.3-3**	**A Novel Buck-Boost Converter with Two Independently Controlled Switches**			
			Botila	Delia-Anca	Politehnica University Timisoara	Romania
			Pop-Calimanu	Ioana-Monica	Politehnica University Timisoara	Romania
			Lascu	Dan	Politehnica University Timisoara	Romania
			Lica	Septimiu	Politehnica University Timisoara	Romania
11:05h	04826	**T1.3-4**	**Experimental Verification of a Peak Limiting Current Mode Controlled Switching Cell Model**			
			Glisic	Marija	University of Belgrade, School of Electrical Engineering	Serbia
			Pejovic	Predrag	University of Belgrade, School of Electrical Engineering	Serbia
10:20h	**SESSION -T2.1**		**AUTOMOTIVE AND INDUSTRIAL DRIVES**		**Central builidng UNS-HALL 1**	
		Chair:	**Prof. Miroslav Vasić, Universidad Politecnica de Madrid, Spain**			
		Co-chair:	**Dr. Michail Vasiladiotis, ABB Switzerland, Turgi, Switzerland**			
10:20h	01626	**T2.1-1**	**Rotor Position Estimation Using Field Current Response to Phase-shifted PWM for Synchronous Homopolar Motor**			
			Gulyaeva	Maria	Moscow Power Engineering Institute	Russian Federation
			Anuchin	Alecksey	Moscow Power Engineering Institute	Russian Federation
			Aliamkin	Dmitry	Moscow Power Engineering Institute	Russian Federation
			Lashkevich	Maxim	Moscow Power Engineering Institute	Russian Federation
10:35h	02926	**T2.1-2**	**Heat Dissipation Balancing in a Switched Reluctance Drive by Combined Use of Active and Passive Thermal Control Methods**			
			Anuchin	Alecksey	Moscow Power Engineering Institute	Russian Federation
			Briz	Fernando	University of Oviedo	Spain
			Gulyaev	Igor	Ogarev Mordova State University	Russian Federation
			Zharkov	Alexandr	Moscow Power Engineering Institute	Russian Federation
			Gulyaeva	Maria	Moscow Power Engineering Institute	Russian Federation
			Popova	Viktoriya	Ogarev Mordova State University	Russian Federation
10:50h	04926	**T2.1-3**	**Exciting Force Frequency Control of Unbalanced Vibratory Actuators**			
			Despotović	Željko V.	University of Belgrade, Mihajlo Pupin Institute	Serbia
			Pavlović	Aleksandar M.	University of Belgrade, Mihajlo Pupin Institute	Serbia
			Ivanić	Dušan	Thermal Power Plants "Nikola Tesla-B"	Serbia
11:20 - 11:30h			**REFRESHMENT BREAK**			

11:30h	**PLENARY Session - KN3**		**KEY-NOTE PAPERS**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Goce Arsov, Univ. "Ss Cyril and Methodius" Skopje, Fac. of Electrical Engineering and Information Technologies**			
		Co-chair:	**Assc.Prof. Boris Dumnić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
11:30h		**KN3-1**	**Demystifying power GaN devices: theory and application**			
			Vasic	Miroslav	Universidad Politecnica de Madrid	Spain
12:10h	**PLENARY Session - IP2**		**INVITED PRESENTATION**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Goce Arsov, Univ. "Ss Cyril and Methodius" Skopje, Fac. of Electrical Engineering and Information Technologies**			
		Co-chair:	**Assc.Prof. Boris Dumnić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
12:10h		**IP2-1**	**Evolution of high-power SiC modules"**			
			Thal	Eckhard	Mitsubishi Electric Europe	Germany
12:40h - 13:40h			**LUNCH BREAK**			
13:00 - 16:00h			**Hard&Soft Student Competition – FINALE**		**Central building UNS-AMPHITHEATER**	
14:30h	**INDUSTRY SESSION**		**Presentations - 2**		**Central builidng UNS-HALL 1**	
		Chair:	**Assc.Prof. Vladimir Rajs, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
		Co-chair:	**Ivana Isakov, , University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
16:00 - 16:15h			**REFRESHMENT BREAK**			
16:15h	**SESSION -T1.4**		**POWER CONVERTERS AND DEVICES**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Dražen Dujić, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**			
		Co-chair:	**Ki-Bum Park, ABB Corporate Research, Switzerland**			
16:15h	05026	**T1.4-1**	**A Clamping Circuit for Short Circuit Ruggedness Improvement of Discrete IGBT Devices based on the di/dt Feedback of Emitter Stray Inductance**			
			Liu	Xing	Chemnitz University of Technology	Germany
			Kowalsky	Jens	Chemnitz University of Technology	Germany
			Lutz	Josef	Chemnitz University of Technology	Germany
16:30h	05126	**T1.4-2**	**Fully MCU-Based DCM Control of On-Board Charger**			
			Gregorio	Matteo	Politecnico di Torino	Italy
			Mandrile	Fabio	Politecnico di Torino	Italy
			Bojoi	Radu	Politecnico di Torino	Italy
			Gillone	Alessio	Vishay Semiconductor Italiana S.p.A.	Italy
			Damilano	Claudio	Vishay Semiconductor Italiana S.p.A.	Italy
16:45h	05226	**T1.4-3**	**Design and Characterization of Feedforward Buck Converter Control Circuit**			
			Filipovic	Nemanja	University of Belgrade, School of Electrical Engineering	Serbia
			Pejovic	Predrag	University of Belgrade, School of Electrical Engineering	Serbia
17:00h	05326	**T1.4-4**	**Influence of Slope Compensation on Operating Modes of Current Mode Controlled Converters**			
			Glišić	Marija	University of Belgrade, School of Electrical Engineering	Serbia
			Pejović	Predrag	University of Belgrade, School of Electrical Engineering	Serbia
17:15h	05926	**T1.4-5**	**INVESTIGATION OF TEMPERATURE DISTRIBUTION IN SIC POWER MODULE PROTOTYPE IN TRANSIENT CONDITIONS**			
			Olanrewaju	Olufisayo	University of Nottingham	United Kingdom
			Yang	Zineng	RWTH Aachen University	Germany
			Evans	Nathan	Supergrid Institute	France
			Fayaz	Asad	University of Nottingham	United Kingdom
			Lagier	Thomas	Supergrid Institute	France
			Castellazzi	Alberto	University of Nottingham	United Kingdom
17:30h	03926	**T1.4-6**	**Computational Model of Coils for Wireless Power Transfer with Reluctance Network Analysis**			
			Furukawa	Keita	Nagaoka University of Technology	Japan
			Kusaka	Keisuke	Nagaoka University of Technology	Japan
			Itoh	Jun-ichi	Nagaoka University of Technology	Japan

17:45h	04226	**T1.4-7**	**Battery Management System with Flying Capacitor Converter Operated in Discontinuous Current Mode**			
			Shioi	Taisuke	Nagaoka University of Technology	Japan
			Miyashita	Mitsuru	Nagaoka University of Technology	Japan
			Nagai	Satoshi	Nagaoka University of Technology	Japan
			Kusaka	Keisuke	Nagaoka University of Technology	Japan
			Itoh	Jun-ichi	Nagaoka University of Technology	Japan
			Nakanishi	Toshiki	San-Eisha Ltd.	Japan
			Kobayashi	Kazuhiro	San-Eisha Ltd.	Japan
18:00h	02226	**T1.4-8**	**Impact of quasiperiodic steady-state on boost converter current stress and inductor copper losses**			
			Stojanović	Željko	University of Applied Sciences Zagreb, Department of electrical engineering	Croatia
			Pelin	Denis	Univ. of Osijek, Fac. of Electrical Engineering, Computer Science and Information Technology	Croatia
			Brandis	Andrej	Univ. of Osijek, Fac. of Electrical Engineering, Computer Science and Information Technology	Croatia
16:15h	**SESSION -T6.1**		**POWER QUALITY**		**Central buildng UNS-HALL 1**	
		Chair:	**Dr. Vladimir Vukić, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
		Co-chair:	**Asst.Prof. Aleksandar Stanisavljević, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
16:15h	00326	**T6.1-1**	**Fractional-Order Adaptive Recurrent Neural Sliding Mode Control of Active Power Filter**			
			Fei	Juntao	Hohai University	China
			Wang	Huan	Hohai University	China
16:30h	00526	**T6.1-2**	**The Influence of Power Frequency Deviation on the Active and Reactive Power Measurement Error with the Application of DFT**			
			Serov	Andrey	National Research University "Moscow Power Engineering Institute"	Russian Federation
			Shatokhin	Alexander	National Research University "Moscow Power Engineering Institute"	Russian Federation
			Dolgacheva	Ekaterina	National Research University "Moscow Power Engineering Institute"	Russian Federation
			Novitskiy	Alexander	Technical University of Ilmenau	Germany
			Schlegel	Steffen	Technical University of Ilmenau	Germany
			Westermann	Dirk	Technical University of Ilmenau	Germany
16:45h	05626	**T6.1-3**	**Passive, active and hybrid filters as a part of the energy efficient electrical drives curriculum**			
			Vukojčić	Slobodan	MIKA PS	Serbia
			Pavlović	Stefan	ABB d.o.o	Serbia
			Ristić	Leposava	University of Belgrade, School of Electrical Engineering	Serbia
17:00h	06926	**T6.1-4**	**Machine learning for application in distribution grids for power quality applications**			
			Turovic	Radovan	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Stanisavljevic	Aleksandar	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Dragan	Dinu	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Katic	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
17:15h	05826	**T6.1-5**	**Experimental Research on Electrocoagulation for Wastewater Treatment**			
			Hedeş	Alexandru	University POLITEHNICA Timişoara	Romania
			Vitan	Liviu-Dănuţ	University POLITEHNICA Timişoara	Romania
			Tudoran	Constantin-Adrian	BeeSpeed Automatizari	Romania
			Muntean	Ovidiu	BeeSpeed Automatizari	Romania
17:30h	**SESSION T3.1**		**ELECTRICAL MACHINES**		**Central buildng UNS-HALL 1**	
		Chair:	**Dr. Vladimir Vukić, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
		Co-chair:	**Asst.Prof. Aleksandar Stanisavljević, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
17:30h	02726	**T3.1-1**	**Comparison of High-Speed Single-Phase Flux Reversal Motor and Hybrid Switched Reluctance Motor**			
			Prakht	Vladimir	Ural federal University	Russian Federation
			Dmitrievskii	Vladimir	Ural federal University	Russian Federation
			Kazakbaev	Vadim	Ural federal University	Russian Federation
			Oshurbekov	Safarbek	Ural federal University	Russian Federation
17:45h	02026	**T3.1-2**	**PLECS™ vs. VisSim™: Simulations ofFluxes in an Induction Motor**			
			Vračar	Darko	University of Belgrade, School of Electrical Engineering	Serbia
19:30h			**GALA DINER**		**Restaurant "Alaska Barka", Novi Sad**	

Saturday, 26 Oct. 2017.

08:00 - 13:00h			**REGISTRATION**			
10:00h	**SESSION -T1.5**		**POWER CONVERTERS AND DEVICES**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Dr. Vladimir Vukić, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
		Co-chair:	**Assc.Prof. Stevan Grabić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
10:00h	03626	**T1.5-1**	**Comparison of the Switching Energy Losses in Cascode and Enhancement-Mode GaN HEMTs**			
			Vukić	Vladimir	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
			Mrvić	Jovan	University of Belgrade, Electrical Engineering Institute Nikola Tesla	Serbia
			Katić	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
10:15h	06326	**T1.5-2**	**Low Cost High Performance Non-Electrolytic-Capacitor Based LED Driver for Street Light Applications**			
			Elboudi	Ghadah	Arab Academy For Science And Technology	Egypt
			Zakzouk	Nahla	Arab Academy For Science And Technology	Egypt
			Absdelsalam	Ahmed	Arab Academy For Science And Technology	Egypt
10:30h	06626	**T1.5-3**	**Review of MPC tehniques for MMCs**			
			Majstorović	Milovan	University of Belgrade, School of Electrical Engineering	Serbia
			Rivera	Marco	Universidad de Talca, Department of Electrical Engineering	Chile
			Ristić	Leposava	University of Belgrade, School of Electrical Engineering	Serbia
10:00h	**SESSION T3.2**		**ELECTRICAL MACHINES**		**Central builidng UNS-HALL 1**	
		Chair:	**Asst.Prof. Dejan Jerkan, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
		Co-chair:	**Dr. Žarko Janda, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**			
10:00h	05426	**T3.2-1**	**Optimal Flux and Current Trajectories for Efficient Operation of Induction Machines**			
			Dominic	Antony	Reutlingen University	Germany
			Schullerus	Gernot	Reutlingen University	Germany
			Winter	Martin	Reutlingen University	Germany
10:15h	05726	**T3.2-2**	**Performance Analysis of Brushless Doubly Fed Reluctance Generator**			
			Taluo	Taufik	University of Belgrade, School of Electrical Engineering	Serbia
			Ristić	Leposava	University of Belgrade, School of Electrical Engineering	Serbia
			Jovanović	Milutin	Northumbria University at Newcastle	United Kingdom
10:30h	06026	**T3.2-3**	**Numerical investigation of properties of small size Axial Flux Permanent Magnet motors**			
			Stepien	Mariusz	Silesian University of Technology	Poland
			Mikos	Jan	Silesian University of Technology	Poland
			Kallaste	Ants	Tallinn University of Technology	Estonia
			Rassolkin	Anton	Tallinn University of Technology	Estonia
10:45h	01026	**T3.2-4**	**Optimum Design of IE5 Energy-Efficiency Class Synchronous Reluctance Motor**			
			Dmitrievskii	Vladimir	Ural Federal University	Russian Federation
			Prakht	Vladimir	Ural Federal University	Russian Federation
			Kazakbaev	Vadim	Ural Federal University	Russian Federation
			Oshurbekov	Safarbek	Ural Federal University	Russian Federation
11:00h	**PLENARY Session - IP3**		**INVITED PAPERS**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Dražen Dujić, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**			
		Co-chair:	**Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
11:00h	00226	**IP3-1**	**New Indirect Measurement Procedure For Determining TheRegulation Characteristics Of The Synchronous Machine**			
			Varga	Jožef	WOLONG-SEVER d.o.o.	Serbia
			Jerkan	Petar	WOLONG-SEVER d.o.o.	Serbia
			Najdanović	Aleksandar	WOLONG-SEVER d.o.o.	Serbia
11:30 - 11:40h			**REFRESHMENT BREAK**			

11:40h	**PLENARY Session - KN4**		**KEY-NOTE PAPERS**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Dražen Dujić, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**			
		Co-chair:	**Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
11:40h		**KN4-1**	**A New Generation of Three-Phase PWM Inverter Concepts**			
			Kolar	Johann W.	PES Lab., Swiss Federal Institute of Technology, ETH	Switzerland
12:20h	**PLENARY Session - IP4**		**INVITED PAPERS**		**Central building UNS-AMPHITHEATER**	
		Chair:	**Prof. Dražen Dujić, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**			
		Co-chair:	**Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**			
12:20h	07526	**IP4-1**	**Role of Power Electronics – a view after 20 Symposiums on Power Electronics in Serbia**			
			Katic	Vladimir	University of Novi Sad, Faculty of Technical Sciences	Serbia
			Arsov	Goce	Univ. “Ss Cyril and Methodius” Skopje, Fac. of Electrical Engineering and Information Technologies	North Macedonia
12:40h			**CLOSING**		Central Building UNS-AMPHITHEATER	

XX Savetovanje Energetska elektronika - Ee 2019

Mesto: Univerzitet u Novom Sadu - Centralna zgrada, Novi Sad

Preliminarni Program / Preliminary Program

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Updated: Oct. 19, 2019

Sreda, 23 Okt. 2019.			
		DOGAĐAJI PRE POČETKA KONFERENCIJE	
10:00 - 11:45h		**IEEE PELS/IES/IAS Jt. Chapter Meeting:**	
12:00 - 15:00h		**Registracija Tutorijali // HARD & SOFT Studentsko takmičenje (Pripreme)**	
13:00 - 13:30h		**OTVARANJE - Tutorijali // HARD & SOFT Studentsko takmičenje**	
13:30 - 18:00h		**Tutorijal 1 (Osveženje u sali)**	
13:30 - 18:00h		**Tutorijal 2 (Osveženje u sali)**	
18:30 - 20:30h		**ZABAVA SA PIVOM (NS Craft Beers)**	
		KONFERENCIJA	
Četvrtak, 24 Okt. 2019.			
09:00 - 18:30h		**HARD & SOFT Studentsko takmičenje (Pripreme)**	**FTN-Čitaonica**
09:00 - 18:30h		**REGISTRACIJA**	
09:00h		**PRIJEM UČESNIKA I GOSTIJU**	
09:30h	**PLENARY Session**	**OTVARANJE**	**Centralna zgrada UNS-AMFITEATAR**
	Chair:	**Prof. Vladimir Katić, University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia**	
	Co-chair:	**Prof. Dražen Dujić, PEL, Swiss Federal Institute of Technology – EPFL, Lausanne, Switzerland**	
	Co-chair:	**Dr. Dragan Kovačević, Electrical Engineering Institute "Nikola Tesla", University of Belgrade, Belgrade, Serbia**	
		- Opening	
		- Music	
		- Greetings	
		DALJE PO PROGRAMU ZA 20th INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS	
12:30h - 13:30h		**RUČAK**	
		DALJE PO PROGRAMU ZA 20th INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS	
18:45h - 20:30h		**KOKTEL DOBRODOŠLICE**	
Petak, 25 Okt. 2019.			
09:00 - 12:30h		**HARD & SOFT Studentsko takmičenje (Pripreme)**	**FTN-Čitaonica**
09:00 - 18:30h		**REGISTRACIJA**	
		DALJE PO PROGRAMU ZA 20th INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS	
13:00 - 16:00h		**HARD & SOFT STUDENTSKO TAKMIČENJE - FINALNE PREZENTACIJE**	**Centralna zgrada UNS-AMFITEATAR**
13:30 - 14:30h		**GODIŠNJA SKUPŠTINA DRUŠTVA ZA ENERGETSKU ELEKTRONIKU**	**Central builidng UNS-HALL 1**
		Prof. Katić Vladimir	Predsednik Društva za energetsku elektroniku, Novi Sad
		DALJE PO PROGRAMU ZA 20th INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS	
19:30h		**SVEČANA VEČERA**	

Subota, 26 Okt. 2019.

08:00 - 13:00h **REGISTRACIJA**

	Id rada	Tema	Naslov rada i Autori			Država
08:45h	**SESIJA - S1**		**ENERGETSKA ELEKTRONIKA, POGONI I OBNOVLJIVI IZVORI**		**Centralna zgrada UNS-AMFITEATAR**	
		Predsed.:	**Goce Arsov, Univerzitet Sv. Kiril i Metodij, Skoplje, Makedonija**			
		Ko-Predsed.:	**Zoltan Čorba, Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad, Srbija**			
08:45h	00727	**S1-1**	ANALIZA OPRAVDANOSTI PRIMENE SUPERKONDENZATORA U POGONU ELEKTRIČNOG AUTOMOBILA			
			Nikola	Vukajlović	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Milicevic	Dragan	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Dumnic	Boris	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Popadić	Bane	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Katić	Vladimir	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
09:00h	00527	**S1-2**	POREĐENJE ELEKTRIČNIH POGONA KRIVAJNIH PRESA			
			Vilotić	Dragiša	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Katić	Vladimir	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
09:15h	00427	**S1-3**	PREGLED SOFTVERSKIH REŠENJA ZA UPRAVLJANJE ENERGETSKIM SISTEMIMA			
			Stefanović	Miroslav	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Stefanović	Darko	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Vrhovac	Vijoleta	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Žižakov	Marina	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
09:30h	00327	**S1-4**	DISTRIBUIRANI ELEKTRO-ENERGETSKI RESURSI – ISKUSTVA PROJEKTNOG PRISTUPA U NASTAVI			
			Katić	Vladimir	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
09:45h	00627	**S1-5**	BUDUĆNOST KORIŠĆENJA SOLARNE ENERGIJE ZA NAPAJANJE MALIH POTROŠAČA - NETO MERENJE U SRBIJI			
			Čorba	Zoltan	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Popadić	Bane	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Katić	Vladimir	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Milicevic	Dragan	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija
			Dumnic	Boris	Univerzitet u Novom Sadu, Fakultet tehničkih nauka	Srbija

DALJE PO PROGRAMU ZA 20th INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS

12:40h **ZATVARANJE SKUPA**