

Conference
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**2018 19th International Scientific
Conference on Electric Power
Engineering (EPE)**

EPE
2018

Welcome...

to the 2018 19th International Scientific Conference on Electric Power Engineering (EPE). On behalf of the organizing committee who has been working for over a half year to put this meeting together, we cordially welcome all participants. The EPE conferences are organized in turns by three technical universities. This year it is a cooperation of Brno University of Technology and Czech Technical University in Prague.

Our goal in planning this meeting has been to provide an intellectually stimulating atmosphere for the exchange of scientific ideas concerning research, development and service in electrical power engineering area in a relaxing environment. We hope that you will have the opportunity to take advantage of the conference venue. Please don't hesitate to contact one of us if any questions arise.

Thanks for coming, and enjoy your time in Brno!

May 16 – 18, 2018, Brno, Czech Republic

The Conference Program

Wednesday 16th of May, 2018

9:00 - 16:00	Participants Registration – 2 nd floor		
10:30 - 11:10	Room A - Conference Opening Ceremony		
11:10 - 11:50	Room A – Keynote Presentation – Prof. Lothar Fickert		
11:50 - 13:30	Lunch – Restaurant 2 nd floor		
14:00 - 15:30	Parallel Sessions 1		
	Room A - Session A1 Electric Networks I	Room B - Session B1 EMC and Diagnostics I	Room C - Session C1 High Voltage
15:30 - 16:00	Coffee Break 1 st and 2 nd floor		
16:00 - 17:30	Parallel Sessions 2		
	Room A - Session A2 Electric Networks II	Room B - Session B2 EMC and Diagnostics II	Room C - Session C2 Heat Systems
19:00 - 24:00	Welcome party – Restaurant 2 nd floor		

Notes to presentations

Presentation types and times

K	Keynote presentation	
L	Standard presentation	15 minutes for presentation + 5 minutes for discussion
S	Special presentation	15 minutes for presentation + 5 minutes for discussion

We kindly ask presenting authors to be present in the room at least 10 minutes before the session starts. Please introduce yourself to the chairman and deliver your presentation (USB drive is expected).

Thursday 17th of May, 2018

8:00 - 10:00	Participants Registration – 2 nd floor			
8:15 - 9:15	Parallel Sessions 3			
	Room A - Session A3 Illumination Systems I	Room B - Session B3 EMC and Diagnostics III	Room C - Session C3 Nuclear Systems I	Room D - Session D3 Renewable Energy Sources I
9:15 - 9:45	Coffee Break 1 st and 2 nd floor			
9:45 - 11:30	Parallel Sessions 4			
	Room A - Session A4 Electric Networks III	Room B - Session B4 EMC and Diagnostics IV	Room C - Session C4 Nuclear Systems II	Room D - Session D4 Power Electronics, Drives and Apparatus I
11:30 - 13:30	Lunch – Restaurant 2 nd floor			
13:30 - 15:30	Parallel Sessions 5			
	Room A - Session A5 Electric Networks IV	Room B - Session B5 Electrical Protections I	Room C - Session C5 Nuclear Systems III	Room D - Session D5 Renewable Energy Sources II
15:30 - 16:00	Coffee Break 1 st and 2 nd floor			
16:00 - 17:30	Parallel Sessions 6			
	Room A - Session A6 Power Quality I	Room B - Session B6 Electrical Protections II		Room D - Session D6 Power Electronics, Drives and Apparatus II
18:30	Departure from the hotel Santon to the Brewery Starobrno by Buses			
19:00 - 24:00	The Conference Banquet – Brewery Starobrno			

Notes to presentations

Presentation types and times

K	Keynote presentation	
L	Standard presentation	15 minutes for presentation + 5 minutes for discussion
S	Special presentation	15 minutes for presentation + 5 minutes for discussion

We kindly ask presenting authors to be present in the room at least 10 minutes before the session starts. Please introduce yourself to the chairman and deliver your presentation (USB drive is expected).

Friday 18th of May, 2018

8:00 - 10:00	Participants Registration – 2 nd floor			
8:15 - 9:15	Parallel Sessions 7			
	Room A - Session A7 Electric Networks V	Room B - Session B7 Measurements and Signal Analysis I	Room C - Session C7 Illumination Systems II	Room D - Session D7 Power Electronics, Drives and Apparatus III
9:15 - 9:45	Coffee Break 1 st and 2 nd floor			
9:45 - 11:15	Parallel Sessions 8			
	Room A - Session A8 Electric Networks VI	Room B - Session B8 Measurements and Signal Analysis II	Room C - Session C8 Power Quality II	
11:45 - 12:00	Room A Plenary Session – Conference Closing Ceremony			
12:00 - 13:30	Lunch – Restaurant 2 nd floor			

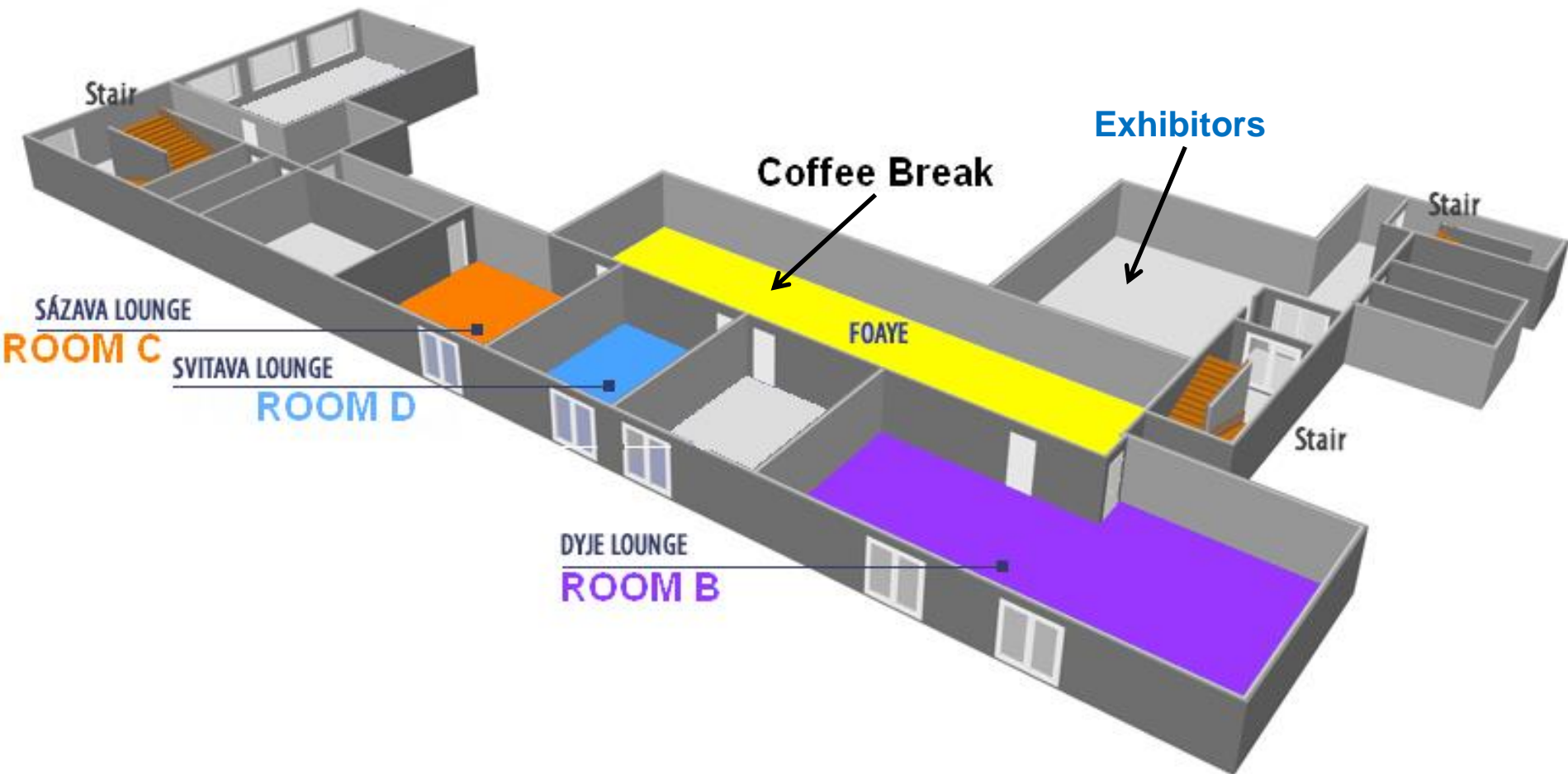
Notes to presentations

Presentation types and times

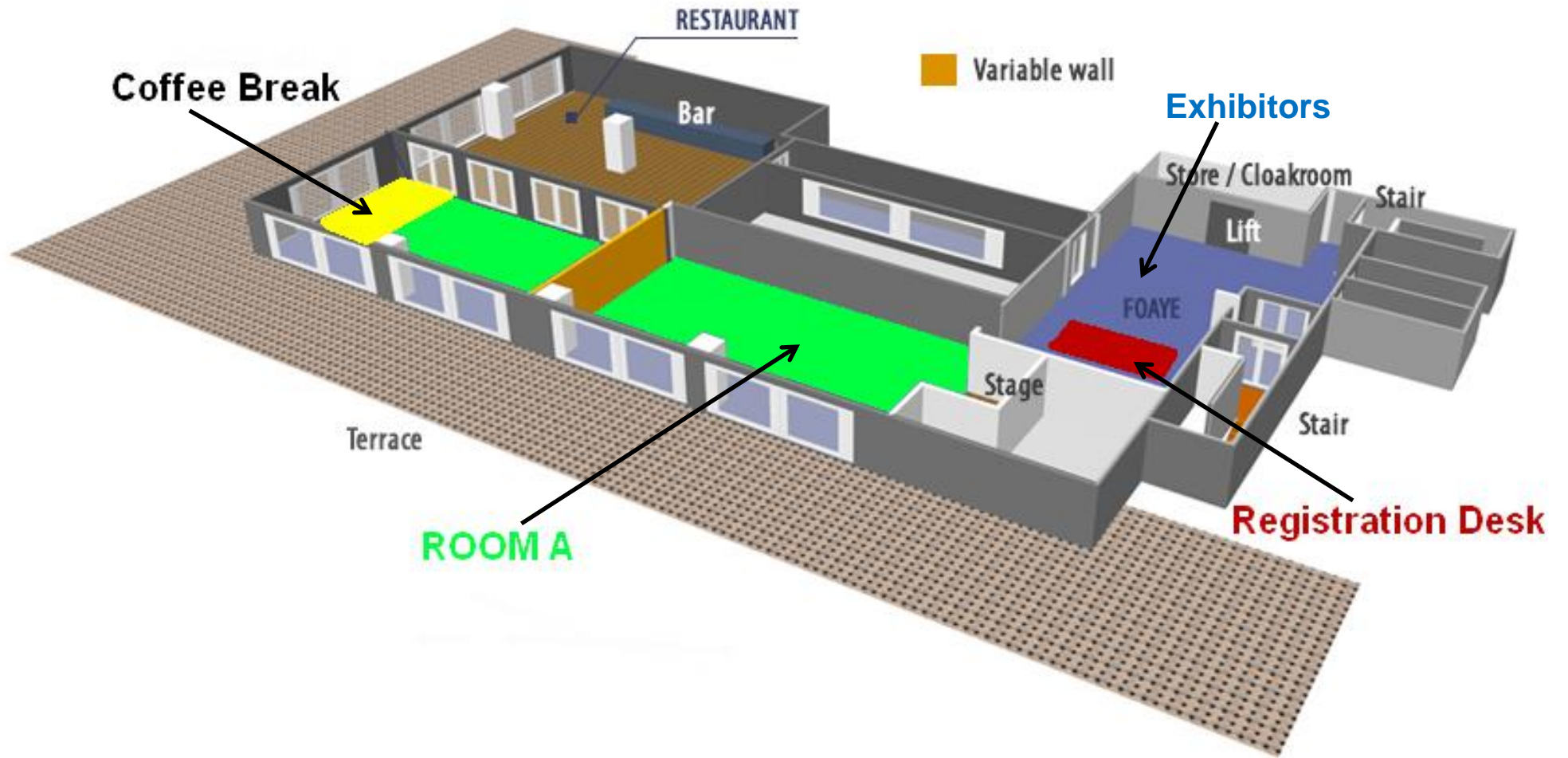
K	Keynote presentation	35 minutes for presentation + 5 minutes for discussion
L	Standard presentation	15 minutes for presentation + 5 minutes for discussion
S	Special presentation	15 minutes for presentation + 5 minutes for discussion

We kindly ask presenting authors to be present in the room at least 10 minutes before the session starts. Please introduce yourself to the chairman and deliver your presentation (USB drive is expected).

Conference plan – 1st floor



Conference plan – 2nd floor



The Conference Program in Detail

Wednesday, May 16, 2018

9:00 – 16:00 Participants Registration

10:30 – 11:10 Room A – Conference Opening Ceremony

11:10 – 11:50 Room A – Keynote Presentation

K128 Earth Fault Current Distribution and Proof Method of Global Earthing Systems

Lothar Fickert (Graz University of Technology, AUT)

11:50 – 13:30 Lunch

14:00 – 15:30 Parallel Sessions 1

Room A – Session A1

Electric Networks I

Chairman: Lothar Fickert

S127 From the Past to the Future of the Czech, Slovak and Central European Power Systems

Jiri Ptacek, Petr Modlitba, Svatopluk Vnoucek, Andrew Kasembe, Milan Straka, Lubos Samsely

L102 Significance of Specific Information on Phase Shifter in Power System State Estimation in Polar Coordinate System

Tomasz Okon, Kazimierz Wilkosz

L080 Determination of Critical Factors for Optimal Positioning of Phase-Shift Transformers in Interconnected Systems

Semir Hadzimuratovic, Lothar Ficker

L049 Analysis of faults impact on gas and electricity systems

Antons Kutjuns, Sergejs Kovalenko, Laila Zemite, Ansis Zbanovs

Room B – Session B1
EMC and Diagnostics I

Chairman: Václav Kolář

L037 Dielectric Behaviour of Gaseous Insulation with Synthetic Air

Rainer Haller, Petr Martinek, Roman Hammar, Eva Müllerova

L075 Polypropylene Foil Response to Voltage Impulses

Bystrík Dolník, Lukáš Kruželák

L041 Dielectric Properties of Biodegradable Vegetable Oil Based Nanofluid

Ondřej Michal, Václav Mentlík, Pavel Trnka, Jaroslav Hornak, Pavel Totzauer

L119 Abrasive Properties of Transformer Oil-Based Magnetic Nanofluid

Samuel Bucko, Martin Krchňák, Roman Cimbala, Lukáš Kruželák, Ján Zbojovský

Room C – Session C1
High Voltage

Chairman: Emil Dvorský

L033 Investigation Into High Voltage Network Reliability Predictive Calculation

Pavel Markovskii, Alexei Merkushev

L020 High Voltage Current Analyzer with Galvanic Separation

Michal Krbal, Jaroslav Stepanek, Vojtech Wasserbauer, Jaroslava Orsagova, Stanislav Sumecek

L024 A New Phase-to-phase Circulating Current Suppressing Strategy for MMC-HVDC

Wei Li, Gengyin Li, Kai Ni

L045 Very Fast High Voltage Impulse Generator

Jan Hlavacek, Martin Knenicky

15:30 – 16:00 Coffee Break

16:00 – 17:30 Parallel Sessions 2

Room A – Session A2
Electric Networks II

Chairman: Anton Kutjuns

L096 The Influence of Smart Grids on a Large Synchronous Generators Operation

Ž. Eleschová, B. Cintula, V. Volčko, A. Beláň, J. Bendík, M. Cenký

L097 Smart Grids Analysis-View of the Transmission Systems Voltage Stability

Ž. Eleschová, A. Beláň, B. Cintula, J. Bendík, M. Cenký

L040 Energy Management System for the Off-Grid Power Distribution Systems

Jan Vysocký, Vojtěch Blažek, Michal Petružela, Stanislav Mišák, Lukáš Prokop

L046 End-user electricity consumption modelling for power quality analysis in residential building

Muhammad Naveed Iqbal, Lauri Kütt

Room B – Session B2
EMC and Diagnostics II

Chairman: Petr Martínek

L072 Operational Testing of Grid-tied Micro Inverters

Petr Mastný, Jan Moravek, Jiri Drapela, Marcelo Bicca Thiele, Gabriel Felipe Chaguri Felicio

L028 Verifying the Functionality of Electrical Regulated Drainage in Real Operating Condition

Vaclav Kolar, Roman Hrbac, Tomas Mlcak

L092 Enclosure Shielding Effectiveness Calculation Using SHADE Algorithm

Stanislav Kovář, Jan Valouch, Tomáš Kadavý, Martin Pospíšilík and Milan Adámek

L108 Influence of shielding paint on the combination of building materials for evaluation of shielding effectiveness

Ján Zbojovský, Marek Pavlík, Zsolt Čonka, Lukáš Kruželák, Michal Kosterec

Room C – Session C2
Heat Systems

Chairman: Petr Mastný

L036 Analysis of passive heat removal system by ANSYS CFX software

Taron Petrosyan, Tsolak Malakyan, Karel Katovsky

L044 Natural Convection From Flat Side's of Coil System

Payam Shams Ghahfarokhi, Ants Kallaste, Anouar Belahcen, Toomas Vaimann

L053 Estimation of Electric Arc Power Loss using Net Emission Coefficient of Argon

Josef Senk, Ilona Laznickova, Ivana Jakubova

L101 Induction System for Hardening of Small Parts

David Rot, Jakub Jirinec, Jiri Kozeny, Antonin Podhrazky, Jiri Hajek, Stanislav Jirinec

19:00 – 24:00 Welcome party – Restaurant 2nd floor

8:15 –9:15 Parallel Sessions 3

Room A – Session A3
Illumination Systems I

Chairman: Jan Morávek

L031 The Calibration of Integrating Sphere with Spectroradiometer with Traceability to Goniophotometer
Martin Motyčka, Jan Škoda, Jaroslav Štěpánek

L065 Changes of blue light hazard for RGB LED
Jaroslav Štěpánek, Jan Škoda, Michal Krbal, Martin Motyčka, Jan Nekvapil

L066 CCTV systems that work with the security lighting
Vict Petr Bos, Richard Baleja, Karel Sokansky, Tomas Novak

Room B – Session B3
EMC and Diagnostics III

Chairman: Petr Mastný

L022 Thermographic diagnostics of a DC traction railway system
Michal Váry, M. Perný

L068 Thermal Design Related Errors of Assemblies for Constructing Sites Discovered During the Temperature Rise Tests
David Simek, Lukas Dostal

L081 Impact of Volume Resistance on the Surface Resistance of Paper
Roman Cimbala, Lukáš Kruželák, Nikola Sekel'ová

Room C – Session C3
Nuclear Systems I

Chairman: Karel Katovský

L093 Experimental Investigation of the Radionuclides Produced in Massive Spallation Target
Miroslav Zeman, Jindrich Adam, Karel Katovsky, Ondrej Stastny, Josef Svoboda, Anton Baldin, Sergey Gustov, Jurabek Khushvaktov, Alexander Solnyshkin, Pavel Tichy, Sergey Tyutyunnikov, Radek Vespalec, Jitka Vrzalova, Lukas Zavorka

L094 Cross-Sections of Nuclear Isomers in the Interaction of Protons on Thin Thorium Target
Robert Golomb, Karel Katovsky Jindrich Adam, Miroslav Zeman, Sandor Tari, Ivan.Haysak, Yuriy Kish, Alexander Solnyshkin, Jurabek Khushvaktov, Jitka Vrzalova, Radek Vespalets, Lukas Zavorka

L104 Process of heat generation and its transfer monitoring at uranium spallation target QUINTA
Josef Svoboda, Jindrich Adam, Miriama Brunciakova, Karel Katovsky, Miroslav Zeman, Anton Baldin, Sergey Gustov, Jurabek Khushvaktov, Alexander Solnyshkin, Pavel Tichy, Sergey Tyutyunnikov, Radek Vespalec

Room D – Session D3
Renewable Energy Sources I

Chairman: Zdeněk Müller

L007 Energy storage in La-Ni based metal hydrides
Artem Chesalkin; Petr Moldrik

L115 Utilization of Energy Storages in Low Voltage Grids with High Penetration of Photovoltaics - Addressing Voltage Issues
Martin Vojtek, Michal Kolcun, Michal Špes

L078 Autonomous Power Supply System Based on a Diesel Generator and Renewable Energy Sources for Remote Rural Areas
Ivan I. Artyukhov, Sergey F. Stepanov, Svetlana V. Molot, Gulsim N. Tulepova, Erbol T. Erbaev, Kubaidolla K. Tulegenov

**Room A – Session A4
Electric Networks III**

Chairman: Petr Toman

- L073** **The potential of distribution grid as an alternative source for reactive power control in transmission grid**
Victor Astapov, Poria Hasanpor Divshali, Lennart Söder
- L079** **The Applicability of Zero Inflated Beta Distributions for Stochastic Modeling of PV Plants Power Output**
Sergei Trashchenkov, Victor Astapov
- L098** **Electric Power System Inertia Increasing by Flywheels**
Emil Dvorsky, Lenka Raková, Pavla Hejtmánková
- L070** **Optimization of Local Cogeneration Stations**
Jan Votava, Jan Kyncl, Libor Straka
- L030** **Machine Learning Approach to Integrate Waste Management Companies in Micro Grids**
Marcel Graus, Philipp Niemietz, Mohammad Touhidur Rahman, Michaela Hiller, Markus Pahlenkemper

**Room B – Session B4
EMC and Diagnostics IV**

Chairman: Michal Váry

- L074** **Partial Discharges and Dielectric Parameters of Epoxy Resin filled with Nanoparticles**
Jozef Kúdelčík, Emil Jahoda, Jaroslav Hornak, Ondřej Michal, Pavel Trnka
- L021** **Polarization in Cables with Current Load**
Đurman V., Váry M.
- L047** **Experimental set-up for observing the influence of radio frequency electromagnetic field on the ticks**
Michal Kosterec, Juraj Kurimský, Blažena Vargová

**Room C – Session C4
Nuclear Systems II**

Chairman: Jan Varmuža

- L088** **Utilization of Expert Systems in Severe Accident Management**
Martin Gajdoš, František Janíček
- L023** **Analysis of the unplanned Shutdowns and Estimation of Reliability in Temelin**
Aleš Hromádka, Jana Jiříčková, Zbyněk Martínek
- L058** **The influence of the fuel thermal conductivity on the core temperatures during LOCA accident**
Stepan Foral, Karel Katovsky, Jan Varmuza, David Salamon, Jakub Rolecek
- L134** **Measurement of $100\text{Mo}(n, 2n)99\text{Mo}$ reaction cross-sections using 10-20 MeV quasi-monoenergetic neutrons**
S. Mukherjee

**Room D – Session D4
Power Electronics, Drives and Apparatus I**

Chairman: Jan Morávek

- L003** **Analysis of Open Phase Condition Influence on an Induction Motor**
Antti Alahäivälä, Matti Lehtonen
- L090** **Reactive Power Compensation of Wind Permanent Magnet Synchronous Generator - Part I**
Nikolay Djagarov, Zhivko Grozdev, Julia Djagarova, Hristo Milushev, Sergey Kokin
- L091** **Reactive Power Compensation of Wind Permanent Magnet Synchronous Generator - Part II**
Nikolay Djagarov, Zhivko Grozdev, Julia Djagarova, Hristo Milushev, Sergey Kokin
- L027** **Dynamic State Space Model Based Analysis of a Three-Phase Induction Motor Using Nonlinear Magnetization Inductance**
Bilal Asad, Toomas Vaimann, Anton Rassolkin, Anouar Belahcen

11:30 – 13:30 Lunch

13:30 – 15:30 Parallel sessions 5

Room A – Session A5
Electric Networks IV

Chairman: Victor Astapov

S200 **SCOPT (Security Constrained OPTimization) - SW tool providing optimal remedial measures in dispatch control system of ČEPS**

Miloslava Chladová, Bohumil Sadecký, Tomáš Klouček, Pavel Baxant, Petr Souček, Vít Mach-Žižka, Marek Smrž

L132 **Compatibility of turbine models for stability studies**

Karel Máslo, Tomáš Hába

L077 **Black Start Test Of Pumped Storage Dlouhé Stráně**

Oldřich Rychlý, Tomáš Linhart, Martin Pistora

L112 **Possibilities of Event Tree Analysis method for Emergency States in Power Grid**

Vaclav Muzik, Zdenek Vostracky

L099 **Short Circuit Current Calculations**

Zsolt Čonka, Karel Máslo, Branislav Bátora

L084 **The Study of Economic Effects When Different Distributed Generators (DG) Connected to a Distribution System**

Pathomthat Chiradeja, Suntiti Yoomak, and Atthapol Ngaopitakkul

Room B – Session B5
Electrical Protections I

Chairman: Petr Toman

L012 **CAD Project of a Class D Surge Arrester Module for Domestic and Residential Low Voltage Applications**

Emil Lazarescu, Cosmin Rimescu, Flaviu Mihai Frigura-Iliasa, Lia Dolga, Hannelore Filipescu, Andreea Anamaria Anghel

L013 **Study about some Two Main Dopants for a ZnO based Varistor Material with 5 Additives, Applied in Overvoltage Protection Equipment**

Cosmin Rimescu, Emil Lazarescu, Flaviu Mihai Frigura-Iliasa, Mihaela Frigura-Iliasa, Lia Dolga, Hannelore Filipescu

L057 **The influence of the short circuit on the parallel conductors of the multi-circuit transmission line**

Tomas Nazarcik, Zdenka Benesova

L089 **Interoperability testing for IEC61850 Based Substation Automation System**

Mayada Daboul, Jaroslava Orságová

Room C – Session C5
Nuclear Systems III

Chairman: Karel Katovský

S201 **Characterizing of AmBe based neutron Time of Flight system**

Narendra Jakhar

L130 **Neutron Induced Reaction Cross-section for the Plasma Facing Fusion Reactor Material - Tungsten Isotopes**

Mayur Mehta, N.L. Singh, S. Khirwadkar, R. Makwana, H. Naik, S. Mukherjee, S.V. Suryanarayana, V. Vansola, Y. Santhi Sheela, K. Katovsky, M. Abhangi, S. Vala, R. Acharya, V. Varmuza

L131 **Defects studies in as-synthesized and neutron-irradiated Mn, Li co-doped ZnO using positron annihilation spectroscopy**

Narendra Jakhar, Dalpat Meena, Naresh Chejara, S.K. Gupta, R.K. Singhal, S.N. Dolia, H.S. Palsania, B.L. Prashant

L067 **Piezoelectric Transformer as a Power Supply for GM Radiation Detector**

Pavel Valenta, Václav Koucký, Jiří Hammerbauer

L111 Cadmium and Gadolinium spectral filters comparison

Jan Varmuza, Karel Katovsky, Miroslav Zeman, Ondrej Stastny, Dusan Kral, Stepan Foral, Robert Holomb

L114 Investigation of Thorium Utilization in Accelerator Driven Systems

Dusan Kral, Miroslav Zeman, Radek Vespalec, Pavel Tichy, Jindrich Adam, Jurabek Khushvaktov, Alexander Solnyshkin, Karel Katovsky

L124 Measuring and simulation of dose at irradiation by bremsstrahlung gamma beam

Haysak I., Martyshychkin V., Plekan R., Takhtasiev O., Katovsky K., Varmuza J., Golomb R.

**Room D – Session D5
Renewable Energy Sources II**

Chairman: Petr Baxant

L006 Intelligent System for Power Load Forecasting in Off-grid Platform

Ibrahim Salem Jahan, Michal Prilepok, Stanislav Misak, Vaclav Snasel

L026 Modeling of Photovoltaic Generation Systems for Reliability study Based on Monte Carlo simulation

Obaida Darwish ,Prof.Dr. Yasser Hegazy ,Dr.Walid Omran

L050 3D Analysis of Vertical Axis Wind Turbine with Enclosure

Michal Petružela, Vojtěch Blažek, Jan Vysocký, Stanislav Mišák

L100 Control of Hybrid Energy Systems and Evaluation of Integration into Virtual Power Plant

Michal Vrana, Ondrej Smugala, Petr Mastny, Jan Moravek, Marcelo Bicca Thiele, Gabriel Felipe Chaguri Felicio

L129 Micro Hydro Power for Off Grid Electrification: A Case Study of Hhaynu River - Mbulu,Tanzania

Urbanus F Melkior, Josef Tlustý, Zdeněk Müller

15:30 – 16:00 Coffee break

16:00 – 17:30 Parallel sessions 6

**Room A – Session A6
Power Quality I**

Chairman: Jiří Drápela

L014 Statistical methods by detection of voltage harmonics in electric power net

Vaclav Kus

L038 Analysis of Supraharmonic Propagation in a MV Electrical Network

Alexander Novitskiy, Steffen Schlegel, Dirk Westermann

L051 Ensuring Power Quality and Stability in Industrial and Medium Voltage Grids

Arun Kannan, Thorsten Reimann, Diana Strauß-Mincu, Marvin Rolle, Christian Dresel

L076 Power Hardware-in-the-Loop test of the energy feedback device in urban rail transportation system

Ziqian Zhang, Lothar Fickert

**Room B – Session B6
Electrical Protections II**

Chairman: Jaroslava Orságová

L105 Application of the directional overcurrent relays with directional comparison system in medium voltage networks

Marek Bañas, Marek Höger, Juraj Altus

L116 Transmission Line Impedance-Differential Protection with Improved Stabilization for External Fault Cases

Krzysztof Solak, Justyna Herlender, Jan Iżykowski

L122 Sharing Sampled Values Between Two Protection Relays According To Standard IEC 61850-9-2LE

Kinan Wannous, Petr Toman

L123 Unsymmetrical fault location on 110 kV lines

Zuzana Bukvišová, Jaroslava Orságová, David Topolánek

Room D – Session D6
Power Electronics, Drives and Apparatus II

Chairman: Matti Lehtonen

L019 Study about the Active Power and Energy Losses of a 400V 57 kW Asynchronous Motor

Adrian Paun, Calin Vinga, Flaviu Mihai Frigura-Iliasa, Emil Cazacu, Lucian Petrescu, Doru Vatau

L120 Reducing Sparking in the Transient Layer of the Sliding Electrical Contact Unit

Oksana Kozyreva, Igor Plokhov, Toomas Vaimann, Anton Rassölkin, Nikita Kotkov, Igor Savraev, Alexander Ilyin, Levon Gevorkov, Ants Kallaste

L029 Simulink Based Model of Electric Drive for Throttle Valve in Pumping Application

Levon Gevorkov, Anton Rassolkin, Ants Kallaste, Toomas Vaimann

L133 Partial Discharge Signal De-Noising by Morphological Filters

Jaroslav Petráš, Jaroslav Džmura, Michal Kosterec

18:10 – 18:20 Meeting before hotel

18:30 Departue to the Brewery Starobrno by Buses

Transfer from the hotel Santon to the Brewery Starobrno is organized by a three privat buses. It is necessary to be ready at least 10 minutes before the departure time – it means at 18:20.

19:00 – 24:00 Conference Banquet in Brewery Starobrno

Casual dress code is expected.

22:00, 23:00, 24:00 **Bus departs from the Starobrno Brewery to the hotel Santon.**
Eventually you can also use the tram connection – Tram No. 1 direction EČEROVA, exit stop PŘÍSTAVIŠTĚ.

8:15 – 9:15 Parallel Sessions 7

Room A – Session A7
Electric Networks V

Chairman: Petr Skala

L008 Power Loss Reduction through Distribution Network Reconfiguration Using Feasibility-Preserving Simulated Annealing

Slawomir Koziel, Alberto Landeros Rojas, Szczepan Moskwa

L059 Influence of Different Weather Conditions on the Maximum Load Current of Overhead Power Lines

Jozef Bendík, Matej Cenký, Žaneta Eleschová, Anton Beláň, Boris Cintula

L107 Voltage withstand properties of the insulation of different types of medium voltage covered overhead line conductors

Ivar Kiitam, Paul Taklaja, Kaur Tuttelberg

Room B – Session B7
Measurements and Signal Analysis I

Chairman: Lucjan Setlak

L071 Energy Consumption Measurements Based on Numerical Integration

Jan Votava, Jan Kyncl, Libor Straka

L083 The Parameters Measurement of Heat Recovery Units

Jakub Jirinec, David Rot

Room C – Session C7
Illumination Systems II

Chairman: Branislav Batora

L113 Reactive power in street lighting network and relation with smart metering in Slovakia

Peter Janiga, Dionyz Gasparovsky, Lukas Lipnicky, Dragan Minovski

L121 Testing of the Software Goniophotometer in Wils - Building Design Computational Programme

Petr Běčák, Tomáš Novák, Richard Baleja, Karel Sokanský

L126 Simulation of skylight in TracePro and comparison with laboratory measurement

Jan Nekvapil, Jan Škoda, Martin Motyčka, Jaroslav Štěpánek, Michal Krbal

Room D – Session D7
Power Electronics, Drives and Apparatus III

Chairman: Levon Gevorgov

L039 Single Shunt Phase Current Reconstruction for Sliding Mode Control Algorithm Driven PMSM

Pavel Skarolek, Jiří Lettl

L042 The tuning method of continuous controllers for controlled systems approximated by nth-order inertial models with delay

Michal S. Laskawski

L032 Experimental investigation of fault tolerant converter connected to unbalanced grid

Viktor Valouch, Petr Šimek, Jiří Škramlík

9:15 – 9:45 Coffee Break

Room A – Session A8
Electric Networks VI
Chairman: Michal Ptáček

L016 Specific Issues of Reliability Simulations of MV Distribution Networks

Petr Skala, Oto Bucholcer

L048 Improvement of Voltage Profile and Mitigation of Power Losses in Case of Faults Using DG Units

Ibrahim Ahmad, Ghaeth Fandi, Zdeněk Müller, Josef Tlustý

L017 Hybrid Mean Variance Mapping Optimization for Dynamic Economic Dispatch With Valve Point Effects

Noha Shouman, Y. G. Hegazy, Walid A. Omran and Gerhard Krost

Room B – Session B8
Measurements and Signal Analysis II
Chairman: Ilona Lázničková

L005 Application of The Numerical Inverse Laplace Transform to Transition Process-Related Problems in Electrical Circuits

Jan Pígl

L025 Usage of data acquisition device NI PCI-6221 for power engineering applications

Milan Belik

L061 Influence of power regulators on the measurement of consumption and supply of electricity

Richard Velicka, Pavel Santarius, Petr Krejci, Tadeusz Sikora

L064 Frequency Measurement in the Power System

Karel Máslo, Martin Procházka

Room C – Session C8
Power Quality II
Chairman: Jiří Drápela

L106 Voltage Quality Problems in Power Supply System of Boiler Stations Using Pumps with Variable-Frequency Drive

Ivan I. Artyukhov, Svetlana V. Molot, Sergey F. Stepanov, Svetlana G. Kalganova, Sergey V. Trigorly, Gulsim N. Tulepova

L117 Evaluation of the VSC-HVDC System Performance in Accordance with the More Electric Aircraft Concept

Lucjan Setlak, and Rafał Kowalik

L118 The Effectiveness of On-board Aircraft Power Sources in Line with the Trend of a More Electric Aircraft

Lucjan Setlak, and Rafał Kowalik

L125 Transformer Inrush - Harmonics in the Current

Jiří Berman, Martin Procházka

11:45 – 12:00 Room A – Conference Closing Ceremony
12:00 – 13:30 Lunch

Notes to presentations

Presentation types and times

K	Keynote presentation	
L	Standard presentation	15 minutes for presentation + 5 minutes for discussion
S	Special presentation	15 minutes for presentation + 5 minutes for discussion

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We would like to invite you to the next conference

**2019 20th International Scientific Conference
on Electric Power Engineering (EPE),**

which will be organized by VŠB TU Ostrava on May 15 – 17, 2019
in Hotel Dlouhé Stráně, Czech Republic.

We are looking forward to seeing you next year.

Organizers



Technical support



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