

# PROGRAMME

WEDNESDAY - JUNE 6, 2018

9:30-11:00	SS3 Special Session 3: Advance concepts for large integration of EV	OS9 Modelling, simulation, and operation of microgrids or isolated systems	OS10 Power system protection
Room	Atrium A	Atrium B	Atrium C
Session Chair	Tomislav Capuder, Hrvoje Pandzic	Anthony Papavasiliou	Kourosh Sedghisigarchi
	175 <b>Optimal Sizing of Battery Storage Units Integrated Into Fast Charging EV Stations</b> <i>Vjekoslav Salapić, Mirna Gržanić, Tomislav Capuder</i>	63 <b>Computation of Electrical Equipment Load Behavior Regarding to Frequency Variations in Isolated Grids</b> <i>Christoph J. Steinhart, Simon Kreutmayr, Michael Finkel, Rolf Witzmann</i>	65 <b>Time Delay Aspect for Basic Line Protection Functions with Synchrophasor in WAMPAC System</b> <i>Igor Ivankovic, Dalibor Brnobic, Srdjan Skok, Ivan Sturlic, Renata Rubesa</i>
	176 <b>Profit Margin of Electric Vehicle Battery Aggregator</b> <i>Ivan Pavić, Hrvoje Pandzic, Tomislav Capuder</i>	142 <b>Smart Grid Modeling and Simulation - Comparing GridLAB-D and RAPSIm via two Case Studies</b> <i>Midhat Jdeed, Ekanki Sharma, Christoph Klemenjak, Wilfried Elmenreich</i>	103 <b>Application of Shunt Busbar Capacitor Installations For Protection of VSC-MTDC Grids</b> <i>Mani Ashouri, Claus Leth Bak, Filipe Faria da Silva</i>
	177 <b>Dissemination of the Electric Vehicle Battery Swapping Station (EVBASS) Project</b> <i>Hrvoje Pandzic, Tomislav Capuder</i>	153 <b>A Study in Microgrid Ownership Effects on Investment Risk in Comparison to Underground Cabling</b> <i>Tony Rosqvist, Sanna Uski, Janne Sarsama</i>	115 <b>Hierarchically Coordinated Protection: A Key Element in Improving Power System Resilience</b> <i>Mohammad Tasdighi, Mladen Kezunovic</i>
	180 <b>Survey on Electric Vehicles and Battery Swapping Stations: Expectations of Existing and Future EV Owners</b> <i>Vedran Bobanac, Hrvoje Pandzic, Tomislav Capuder</i>	143 <b>Decentralized Coordination for Mutual Rescue in Microgrid Clusters</b> <i>Jin Wei, Robin Roche</i>	20 <b>Under-Frequency Load Shedding in the European Interconnection System- A multi-country model for UFLS analyzation under the impact of renewables</b> <i>Andre Richter, Martin Wolter</i>
11:00-12:30	<b>Coffee Break - Poster Session</b> <i>Room: Megaron B</i>		
12:30-14:00	<b>Lunch</b>		

# PROGRAMME

14:00-15:30	<b>OS11</b> Energy conversion and power delivery	<b>OS12</b> Power systems modelling and planning	<b>OS13</b> Information and communication technologies for smart grids
<b>Room</b>	<i>Atrium A</i>	<i>Atrium B</i>	<i>Atrium C</i>
<b>Session Chair</b>	<i>Yuval Beck</i>	<i>George Korres</i>	<i>Prodromos Makris</i>
	36 <b>Concept Design of a Test Bench for Wind Energy Conversion Systems with PMSG Considering Electrical and Mechanical Interactions</b> <i>Katharina Günther, Constantinos Sourkounis, Martin Oddey</i>	2 <b>Tools for Validation and Calibration of Very Large Power System Models</b> <i>Stijn Cole, François Promel</i>	24 <b>Standardized Communication Systems for Distributed Energy Resources in Micro Grids</b> <i>Heinz Frank, Ajit Toradmal</i>
	92 <b>Controlling Excitation of Synchronous Motors to Provide Constant Reactive Power Despite Varying Load</b> <i>Andreas Michaelides, Thanos Nicolaou</i>	53 <b>Planning Criteria Benchmarking and Voltage Stability Study for Marafiq's Yanbu Network</b> <i>Stijn Cole, François Depierreux, Mohammad Asmai Mandili, Ali Ahmad Mohammed Shubaili</i>	31 <b>Predicting Communication Delays in Open Networks for Frequency Control of Smart Grids</b> <i>Huadong Mo, Giovanni Sansavini</i>
	62 <b>Power Quality Challenges and Mitigation Measures in Grid Integration of Wind Energy Conversion Systems</b> <i>Julius Gathua Ndirangu, John Nderu, Christopher Muriithi, Asaph Muhia</i>	147 <b>An Outline of an Active Power Reserve Sharing Process Across Continental Europe</b> <i>Marc Scherer, Göran Andersson</i>	126 <b>An Integrated NAN Architecture for Smart Energy Grid</b> <i>Nikolaos Angelis, Nikolaos Archontos, Demosthenes Vouyioukas, Nikolaos Nomikos, Charalabos Skianis</i>
	94 <b>Improved Synergetic Control in Multi-Terminal HVDC Grid for Offshore Wind Power Delivery</b> <i>Aysar Musa, Lorenzo R. Sabug, Antonello Monti</i>	74 <b>Unified Power Flow Controller Modeling and Analysis Technique on the GCC Power Grid</b> <i>Tariq Masood, Muhammad Chughtai, Suhail Aftab Qureshi, Ghulam Hashmi, Samer Karim Shah, DP Kothari, Nasir Jameel</i>	41 <b>The Method of Narrow Band PLC Channels Throughput Increase</b> <i>Anton Merkulov, Viatcheslav P. Shuvalov</i>
15:30-16:00	<b>Coffee Break</b>		
16:00-17:30	<b>OS14</b> Demand response and energy management	<b>OS15</b> Information and communication technologies in power systems II	<b>SS4</b> Special Session 4: Digitization era for the smart energy grid: Innovative S/W platforms, services, applications and business models
<b>Room</b>	<i>Atrium A</i>	<i>Atrium B</i>	<i>Atrium C</i>
<b>Session Chair</b>	<i>Augusto Casaca</i>	<i>Nicholas Christofides</i>	<i>Prodromos Makris and Vassilis Nikolopoulos</i>

# PROGRAMME

	<p>25 <b>Application of Multilevel Demand Subscription Pricing for Mobilizing Residential Demand Response in Belgium</b> <i>Yuting Mou, Anthony Papavasiliou, Philippe Chevalier</i></p>	<p>26 <b>eChIDNA: Continuous Data Validation in Advanced Metering Infrastructures</b> <i>Joris van Rooij, Marina Papatriantafilou, Vincenzo Gulisano, Magnus Almgren, Johan Swetzén</i></p>	<p>21 <b>SOCIALENERGY: A Gaming and Social Network Platform for Evolving Energy Markets' Operation and Educating Virtual Energy Communities</b> <i>Prodromos Makris, Nikolaos Efthymiopoulos, Dimitrios J. Vergados, Emmanouel Varvarigos, Vassilis Nikolopoulos, John Papagiannis, Andrew Pomazanskyi, Boris Irmscher, Krassen Stefanov, Katina Pancheva, Atanas Georgiev</i></p>
	<p>28 <b>Balancing Energy Production and Consumption in Energy Efficient Neighbourhoods</b> <i>Krzysztof Piotrowski, Marcel Geers, Daniel Garrido, Jaime Chen, Juan Jacobo Peralta, Augusto Casaca, Marco E. T. Gerards</i></p>	<p>136 <b>Spatial Services for Decentralized Smart Green Energy Management</b> <i>Housseem Ben Mahfoudh, Giovanna Di Marzo Serugendo, Nabil Abdennadher, Andreas Rumsch, Andres Upegui</i></p>	<p>83 <b>A Novel Pricing Scheme for Virtual Communities Towards Energy Efficiency</b> <i>Ioannis Mamounakis, Nikolaos Efthymiopoulos, Georgios Tsaousoglou, Dimitrios Vergados, Prodromos Makris, Emmanouel Varvarigos</i></p>
	<p>174 <b>Real-time Optimal Scheduling for Prosumers Resilient to Regulatory Changes</b> <i>Irina Ciornei, Mihaela Albu, Mihai Sanduleac, Enrique Rodriguez-Diaz, Josep Guerrero, Juan C. Vásquez</i></p>	<p>70 <b>Future Perspectives of Co-Simulation in the Smart Grid Domain</b> <i>Cornelius Steinbrink, Florian Schlögl, Davood Babazadeh, Sebastian Lehnhoff, Sebastian Rohjans, Anand Narayan</i></p>	<p>99 <b>Facilitating Integration and Interplay in the DSOs' IT Ecosystem</b> <i>Ilias Lamprinos</i></p>
	<p>80 <b>Development of Real Time Energy Pricing Schemes that Incentivize Behavioral Changes</b> <i>Konstantinos Steriotis, Georgios Tsaousoglou, Nikolaos Efthymiopoulos, Prodromos Makris, Emmanouel Varvarigos</i></p>	<p>161 <b>Synchrophasor Applications using Conic Optimization</b> <i>Nikolaos Manousakis, Themistoklis C. Xygkis, George. N. Korres</i></p>	<p>112 <b>ChArGED: Improving Energy Efficiency in Public Buildings Through IoT-Enabled Energy Disaggregation and Serious Games</b> <i>Nikos Dimitriou, Anastasia Garbi, Thanasis Papaioannou</i></p>
			<p>150 <b>Data-driven Utility Consumer Engagement Case-Studies: Understanding the End Consumer's Behavioral Journey</b> <i>Vassilis Nikolopoulos, John Papagiannis</i></p>
			<p>163 <b>A Sensor-Enabled Rule Engine for Changing Energy-Wasting Behaviours in Public Buildings</b> <i>Thanasis Papaioannou, Kostas Vasilakis, Nikos Dimitriou, Anthony Schoofs, Anastasia Garbi</i></p>
17:30	<b>End of the Day</b>		