



**FINAL PROGRAM**  
CEST (GMT+2) Time Zone

CEST	WEDNESDAY 3 June 2026					
08:00-08:30	Registration					
08:30-09:00	Opening Ceremony					
09:00-10:00	<b>Keynote Session 1: From IEC Methods to IEEE Guidance: Cooperative Standardization for Relay Test Sets</b> Andrea Bonetti, Megger Sweden AB Stockholm, Sweden Ms. Hong WANG(王宏), State Grid Corporation, China					
10:00-11:00	<b>Industry Forum – I</b>  – <b>Enabling the AI-ready Grid with Next Generation Communication Technology</b> Dominique Verhulst, Head of the Energy Segment at Nokia, Finland  – <b>Beyond Simulation: Making Power System Analysis Explainable with Knowledge Graphs and LLMs</b> Svein Harald Olsen, CIM Project Manager, Statnett SF, Norway					
11:00-11:30	Coffee Break					
11:30-13:00	Hall – I	Hall – II	Hall – III	Hall – IV (Online)	Hall – V (Online)	Hall – VI
	TT1–1	TT2–1	TT3–1	TT4–1	TT5–1	
13:00-14:00	Lunch Break					
14:00-15:30	Hall – I	Hall – II	Hall – III	Hall – IV (Online)	Hall – V (Online)	Hall – VI
	TT4–2	TT5–2	TT3–2	TT1–2	TT3–3	
15:30-16:00	Coffee Break					
16:00-17:00	<b>Keynote Session 2: Non-Terrestrial Networks (NTN): A Massive Infrastructure in Space and Near-Space for Connectivity and Beyond</b> Halim Yanikomeroglu, Carleton University, Ottawa, Canada					
17:00-18:30	Hall – I	Hall – II	Hall – III (Hybrid)	Hall – IV (Online)	Hall – V (Online)	Hall – VI
	TT3–4	TT5–3	SS2	TT2–2	TT3–5	

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CEST Time Zone	THURSDAY 4 June 2026					
08:30-09:00	Registration					
09:00-10:00	Hall – I	Hall – II	Hall – III	Hall – IV (Online)	Hall – V (Online)	Hall – VI
	TT3–6	TT1–3	TT4–3			
10:00-11:00	<b>Keynote Session 3: Multi-Objective Optimization for Assessing Tradeoffs Between Energy Sharing and Ancillary Services in Local Energy Communities</b> Pierluigi Siano, University of Salerno, Italy					
11:00-11:30	Coffee Break					
11:30-13:00	Hall – I	Hall – II	Hall – III (Online)	Hall – IV (Online)	Hall – V (Online)	Hall – VI
	TT3–7	TT2–3	TT4–4	TT1–4	TT3–8	
13:00-14:00	Lunch Break					

14:00-15:00	<b>Industry Forum – II</b> <b>– Multi-level EV traction Inverter utilizing GaN and SiC with Dynamic Slew-rate Control</b> Jaeun Cha, Infineon Technologies Americas Corp., USA  <b>– Teaching Protection Engineering with High-Fidelity Digital Twins: Co-Simulation for Scalable, Reproducible Learning</b> Andrea Bonetti, Megger Sweden AB, Sweden Niclas Wetterstrand, Global Industry Director – Utilities Protection, Megger Group, Sweden					
15:00-16:00	<b>Keynote Session 4: Enabling Digital Twins in Power Electronics: Trends and Hardware Considerations</b> Tiago Davi Curi Busarello, Federal University of Santa Catarina, Brazil					
16:00-16:30	Coffee Break					
16:30-18:00	<b>Hall – I</b>	<b>Hall – II (Online)</b>	<b>Hall – III (Online)</b>	<b>Hall – IV (Online)</b>	<b>Hall – V (Online)</b>	<b>Hall – VI</b>
	TT3–9	TT5–4	TT4–5	TT3–10	SS1	
19:00-22:00	Gala Dinner					

<b>CEST Time Zone</b>	<b>FRIDAY 5 June 2026</b>					
08:30-09:00	<b>Industry Forum – III</b> <b>– The Contribution of NIDEC–Motortecnic in the Developing of Hydropower for the Italian Green Energy Transition</b> Massimo Baret, C.E.O. NIDEC Motortecnic					
09:00-10:00	<b>Keynote Session 5: AI-driven Networks, Architectures and Platforms for Advanced Energy Services</b> Alessandro Vizzarri, University of Rome Tor Vergata, Italy					
10:00-11:00	<b>Keynote Session 6: From Energy Transition to Accelerating Disturbances : Origins, Correlation and Mitigation</b> Srdjan Skok, University North, Croatia					
11:00-11:30	Coffee Break					
11:30-13:00	<b>Hall – I</b>	<b>Hall – II (Hybrid)</b>	<b>Hall – III (Hybrid)</b>	<b>Hall – IV (Online)</b>	<b>Hall – V (Online)</b>	<b>Hall – VI</b>
	TT3–11	TT5–5	TT3–12	TT2–4		
13:00-14:00	Lunch Break					
14:00-15:30	<b>Hall – I</b>	<b>Hall – II</b>	<b>Hall – III (Online)</b>	<b>Hall – IV (Online)</b>	<b>Hall – V (Online)</b>	<b>Hall – VI</b>
	TT1-5	TT3-13	TT4–6	TT5-6	TT3–14	
15:30-16:00	Coffee Break					
16:00-17:30	<b>Hall – I (Hybrid)</b>	<b>Hall – II (Hybrid)</b>	<b>Hall – III (Hybrid)</b>	<b>Hall – IV (Online)</b>	<b>Hall – V (Online)</b>	<b>Hall – VI</b>
	TT3–15	TT4–7	TT3–16	TT1–6		
17:30-18:00	Closing Ceremony					

**TT1 – Power Electronics, Devices and Controllers**  
**TT2 – Electrical Machines and Drives**  
**TT3 – Conventional and Renewable Energy Technologies**  
**TT4 – Smart Grid Researches and Applications**  
**TT5 – Communication Technologies and Researches**

# IEEE GPECOM 2026 Programme

CEST Time Zone	Wednesday, June 3rd
08:00 – 08:30	Registration
08:30 – 09:00	<b>Opening Ceremony</b>
09:00 – 10:00	<b>Keynote Session 1: From IEC Methods to IEEE Guidance: Cooperative Standardization for Relay Test Sets</b> Andrea Bonetti, Megger Sweden AB Stockholm, Sweden Ms. Hong WANG(王宏), State Grid Corporation, China <b>Chair: Rosario Miceli</b>
10:00 – 11:00	<b>Industry Forum – I</b> <b>– Enabling the AI-ready Grid with Next Generation Communication Technology</b> Dominique Verhulst, Head of the Energy Segment at Nokia, Finland <b>– Beyond Simulation: Making Power System Analysis Explainable with Knowledge Graphs and LLMs</b> Svein Harald Olsen, CIM Project Manager, Statnett SF, Norway <b>Chair: Renato Rizzo</b>
11:00-11:30	Coffee Break

Session TT1-1	TT1- Power Electronics, Devices and Controllers – I 11:30-13:00	Hall (In-Person)	I
Chairs	<b>Arman Fathollahi</b>		
11:30-11:45	ID 4: Burst Mode Operation of Synchronous Rectifier Flyback Converter under High Load Current for Fast Charge and Balancing Capability of Battery Management System of Electric Aerial Vehicle; Abdulsamet Paltaci (R&D Department Assan Elektronik, Turkiye); Remzi İnan (Isparta University of Applied Sciences, Turkiye)*		
11:45-12:00	ID 222: A Driving-Behavior-Centered Framework for EV Battery Aging, EOF Estimation, and Supervisory Low-Carbon Decision Support; Sihem NASRI (University of Tunis El Manar, Tunisia)*; Aymen Mnasri (ESPRIT, Tunisia); Nouha Mansouri (ESPRIT, Tunisia); Adnane Cherif (University of Tunis El Manar, Tunisia)		
12:00- 12:15	ID 272: Interleaved Differential DC-DC Quadratic Converter with High-Voltage Gain; Armando Cordeiro (University of Lisbon, Portugal)*; Daniel Foito (Instituto Politécnico de Setúbal, Portugal); Joaquim Monteiro (Polytechnic University of Lisbon, Portugal); Daniel Ferreira (Nova University Lisbon, Portugal); João F. Martins (Nova University Lisbon, Portugal); V. Fernão Pires (Instituto Politécnico de Setúbal, Portugal)		
12:15-12:30	ID 304: Stability- and Passivity-Oriented Design of Single-Voltage-Loop Control with Harmonic Mitigation for Grid-Forming Inverters; Yun Yu (Aalborg University, Denmark)*; Yajuan Guan (Aalborg University, Denmark); Jingxuan Wu (Aalborg University, Denmark); Bingchen Jiang (Aalborg University, Denmark); Junlan Ou (Technical University of Catalonia, Spain); Juan C. Vasquez (Aalborg University, Denmark)		
12:30- 12:45	ID 311: Design and Multiphysics Analysis of a Compact Air-Cooled Heatsink for GaN/SiC T-Type Power Converters in Electric Vehicle Applications; Arman Fathollahi (Aarhus University, Denmark)*; Corneliu Barbu (Aarhus University, Denmark)		
12:45-13:00	ID 411: DC-AC Conversion Efficiency Characterisation and Grid Stress Analysis of a Bidirectional EV Charging System Across Multiple Power Levels and States of Charge; Uchenna Johnpaul Aniekwensi (Hochschule Offenburg, Germany)*; Jörg Bausch (Hochschule Offenburg, Germany)		
13:00 – 14:00	Lunch Break		

Session TT2-1	TT2- Electrical Machines and Drives – 1 11:30-13:00	Hall (In-Person)	II
Chairs	<b>Stanimir Valtchev</b>		
11:30-11:45	ID 42: Prediction of Diesel Generator Oil Pressure and Health Status Using a Hybrid Method; Ahmet Yavuz (Yıldız Technical University, Turkiye)*; Yavuz Ateş (Yıldız Technical University, Turkiye); Tayfur Gökçek (Yıldız Technical University)		
11:45-12:00	ID 147: Extended Kalman Filter-based Adaptive Sensorless Control for PMSM Drives Using Blockwise RLS Method; Zsannett Bertók (Budapest University of Technology and Economics, Hungary)*; Csaba Budai (Budapest University of Technology and Economics, Hungary)		
12:00- 12:15	ID 313: A Smart Rotating Power Supply System for Cold Ironing; Filippo Scamardella (University of Naples "Federico II", Italy)*; Davide Lauria (University of Naples "Federico II", Italy); Marco Altosole (University of Naples "Federico II", Italy); Flavio Balsamo (University of Naples "Federico II", Italy); Maria Acanfora (University of Naples "Federico II", Italy)		
12:15-12:30	ID 277: Multicriteria Decision-Making Under Deployment Constraints for Deep Learning Model Selection in Insulator Mechanical Fault Detection; Aralym Serikbay (Nazarbayev University, Kazakhstan); Venera Nurmanova (Nazarbayev University, Kazakhstan)*; Amin Zollanvari (Utah Valley University, USA); Mehdi Bagheri (Nazarbayev University, Kazakhstan)		
12:30- 12:45	ID 355: Multi-Domain Model-Driven Optimization for Networked Control Systems; Hasal Kulasekara Pallewaththe Kankanamge (Technische Universität Dresden, Germany)*; Santiago Soler Perez Olaya (Technische Universität Dresden, Germany); Martin Wollschlaeger (Technische Universität Dresden, Germany)		
12:45-13:00	ID 358: Introduction of Correction Units into the Two Engine Control System Allowing Regulation of Dynamic Processes; Stanimir Valtchev (University NOVA of Lisbon, Portugal)*; Tatyana Sinyukova (Lipetsk State Technical University, Russian Federation); Alexey Sinyukov (Lipetsk State Technical University, Russian Federation); Elena Gracheva (Kazan State Energy University, Russian Federation); Jose Goncalves (University of Namibe, Angola); Bruno Luis (University NOVA of Lisbon, Portugal)		
13:00 – 14:00	Lunch Break		

Session TT3-1	TT3- Conventional and Renewable Energy -1 11:30-13:00	Hall (In-Person)	III
<b>Chairs</b>	<b>Emanuele Fedele</b>		
11:30-11:45	ID 119: Virtual Inertia by Reinforcement Learning Agent For Wind Energy Grid Forming Inverters With Limited Active Power During Grid Voltage Phase Angle Jumps; Qiuye Gui (University of Kassel, Germany)*; Holger Becker (University of Kassel, Germany)		
11:45-12:00	ID 141: Analysis of the Financial Optimal Integration of Photovoltaic and Energy-Saving Technologies on Dairy Farms; R.M. Kelum Sandamal (Munster Technological University, Ireland)*; Darren J. Murphy (Munster Technological University, Ireland); Upaka Rathnayake (Atlantic Technological University, Ireland); Michael D. Murphy (Munster Technological University, Ireland)		
12:00- 12:15	ID 150: Suitability of Single-Machine Dynamic Equivalent Model for Large Offshore Renewable Plant; Harshit Nayak (TU Delft, Netherlands)*; Jose Luis Rueda Torres (TU Delft, Netherlands); Peter Palensky (TU Delft, Netherlands)		
12:15-12:30	ID 219: Hybrid AI-based Forecasting and Optimization of Power Sector Carbon Emissions: Case of Tunisia; Nouha Mansouri (ESPRIT, Tunisia)*; Aymen Mnasri (ESPRIT, Tunisia); Sihem Nasri (FST, Tunisia); Chokri Bouchoucha (STEG, Tunisia); Adhane Cherif (FST, Tunisia)		
12:30- 12:45	ID 261: Active Damping of Low-Frequency Oscillation in VSG-Based Grid-Forming E-STATCOMs; Mohib Ullah (Aalborg University, Denmark)*; Yajuan Guan (Aalborg University, Denmark); Hikmat Basnet (Tampere University, Finland); Tomi Roinila (Tampere University, Finland); Juan C. Vasquez (Aalborg University, Denmark); Josep M. Guerrero (Aalborg University, Denmark)		
12:45-13:00	ID 319: Probabilistic Reliability Assessment of Proton Exchange Membrane Fuel Cells Stacks through a Gini-Gamma Informed Stochastic Process Model; Raveen De Silva (University of Technology Sydney, Australia)*; Kosala Gunawardane (University of Technology Sydney, Australia); Marie-Cécile Pera (Université Marie et Louis Pasteur, France); Elodie Pahon (Université Marie et Louis Pasteur, France); Li Li (University of Technology Sydney, Australia); Hassan Haes Alhelou (University of Technology Sydney, Australia)		
13:00 – 14:00	Lunch Break		

Session TT4-1	TT4- Smart Grid Researches and Applications-1 11:30-13:00	Hall (Online)	IV
<b>Chairs</b>	<b>Jose Luis Rueda Torres</b>		
11:30-11:45	ID 26: Real-Time Voltage Sag Detection in Smart Grids Using an FPGA-Based Peak Monitoring Approach; Güner TATAR (Istanbul Medeniyet University, Turkiye)*		
11:45-12:00	ID 54: IEEE P3416 as a Bridge Between IEEE/IEC Protection Testing Methodologies and Relay Test Set Capability; Andrea Bonetti (Megger Sweden AB)*; Cord Mempel (Omicron Electronics, Austria); Hong Wang (State Grid Corporation, China); JinLei Xing (Schneider Electric, USA); Jun Verzosa (Doble Engineering Company, USA); Thierry Bardou (Schneider Electric, France); Xicai Zhao (NR Electric Co., Ltd., China)		
12:00- 12:15	ID 103: A Unified and Application-Oriented Current Transformer Dimensioning Approach for Modern Protection Systems; Firat Çelik (Siemens AG, Turkiye)*; Yavuz Ateş (Yıldız Technical University, Turkiye)		
12:15-12:30	ID 145: Load Frequency Control for a Two-Area Power System with Time Delay Based on the Artstein Transform; Marcel Nicola (University of Craiova, Romania); Claudiu-Ionel Nicola (University of Craiova, Romania)*		
12:30- 12:45	ID 247: Explainable Machine Learning for Distribution Transformer Load Ratio Forecasting; Asli Sude Yörük (Adana Alparslan Turkes Science and Technology University, Turkiye)*; Kasim Zor (Cukurova University, Turkiye)		
12:45-13:00	ID 252: Key Stability Challenges in Large-Scale Time-Delay Systems and Cloud Control Systems; Ashraf Khalil (Technical University of Denmark, Denmark)*		
13:00 – 14:00	Lunch Break		

Session TT5-1	TT5- Communication Technologies and Researches -1 11:30-13:00	Hall (Online)	V
<b>Chairs</b>	<b>Mehmet Bilim</b>		
11:30-11:45	ID 332: Comparative Performances of Spiral Resonator Array Antenna Fed by Proximity-Coupled and Aperture-Coupled Feeding Techniques; Budi Syihabuddin (Telkom University, Indonesia); Muhammad Farhan Maulana (Telkom University, Indonesia); Yamato Tan (University of Pakuan, Indonesia); Mochamad Yunus (University of Pakuan, Indonesia); Fakhruddin Ahmad Nasution (Institut Teknologi Bandung, Indonesia)*; Achmad Munir (Institut Teknologi Bandung, Indonesia)		
11:45-12:00	ID 142: Energy Consumption Analysis of Application Layer Protocols in Realistic IoT Uplink Scenarios: An Empirical Study on an ESP32 Microcontroller; Daniele Quartinieri (University of Amsterdam, Netherlands)*; Marios Avgeris (University of Amsterdam, Netherlands); Adam Belloum (University of Amsterdam, Netherlands)		
12:00- 12:15	ID 20: New Indoor Path Loss Models for THz Communications Using Synthetic Data; Alex Creasy (Durham University, UK); Yunfei Chen (Durham University, UK)*		
12:15-12:30	ID 340: Utilization of Magneto-dielectric Material for Selectivity Enhancement of Waveguide BPF; Junas Haidi (Institut Teknologi Bandung, Indonesia); Dwi Andi Nurmantris (Telkom University, Indonesia)*; Agustinus Agung Nugroho (Institut Teknologi Bandung, Indonesia); Achmad Munir (Institut Teknologi Bandung, Indonesia)		
12:30- 12:45	ID 423: Redesign and Optimization of a Database Architecture for a National-scale SMS Messaging Settlement System; Gokturk Poyrazoglu (Ozyegin University, Turkiye)*; Emin Kartci (Politecnico di Milano, Italy); Esra Turna (Turkcell Technology, Turkiye)		
12:45-13:00	ID 441: Robustness of Classical Machine Learning and Deep Learning Models for Automatic Modulation Recognition Under Unseen SNR Conditions; Leul Merid Tilahun (University of Wollongong in Dubai, UAE); Joud Almomani (University of Wollongong in Dubai, UAE); Obada Al-Khatib (University of Wollongong in Dubai, UAE)*; Abeer Elkhoully (University of Wollongong in Dubai, UAE)		
13:00 – 14:00	Lunch Break		

Session TT4-2	TT4- Smart Grid Researches and Applications-2 14:00-15:30	Hall (In-Person)	I
Chairs	Aydin Boyar		
14:00-14:15	ID 457: Impact of Traction Motors Bearings Degradation in Common Mode Current; Luigi Pio Di Noia(University of Napoli Federico II, Italy); Emanuele Fedele*(University of Napoli Federico II, Italy); Santolo Meo(University of Napoli Federico II, Italy); Renato Rizzo (University of Napoli Federico II, Italy)		
14:15-14:30	ID 149: Application of Genetic Algorithm and Step-wise Evaluation of Multi-Objectives to Optimize Location of Normally Open Points within Meshed Distribution Networks; Emmanuel Kwasi Chrappah (Electricity Company of Ghana)*; Maxwell Kwesi Graham (Electricity Company of Ghana); Felix Kwame Owusu (Illinois Institute of Technology); Vincent Safo Antwi (Electricity Company of Ghana); Nana Adwoa Mensima Enninful (Electricity Company of Ghana); Irene Yram Kondoh (Electricity Company of Ghana)		
14:30-14:45	ID 295: Critical Node Identification in Power Grids Considering Line Impedance and Power Losses; Linglin Meng (Shenyang University of Technology, China)*; Haixin Wang (Shenyang University of Technology, China); Yanxing Du (Shenyang University of Technology, China); Guiqing Ma (Shenyang University of Technology); Junyou Yang (Shenyang University of Technology, China); Zhe Chen (Aalborg University, Denmark)		
14:45-15:00	ID 349: Particle Swarm Optimization-Based Approach for Stability Assessment of Grid-Resilient Electric Vehicle Charging Stations; Puneet Sharma (IIT Mandi, India)*; Pratim Kundu (IIT Mandi, India); Manohar Singh (PEC Chandigarh, India)		
15:00- 15:15	ID 359: Facility-Level EV Hosting Capacity Under Headroom Constraints: A Smart Charging Approach; Razan Habeeb (TU Dresden, Germany)*; Syed Irtaza Haider (TU Dresden, Germany); Shiwei Shen (TU Dresden, Germany); Rico Radeke (TU Dresden, Germany); Frank H. P. Fitzek (TU Dresden, Germany)		
15:15-15:30	ID 377: Hybrid Genetic Algorithm-Particle Swarm Optimization for PI Controller Parameter Tuning in DFIG-Based Wind Turbine MPPT Systems; Mohammed Es-salmi (Sidi Mohamed Ben Abdellah University, Morocco); Mohammed Taoussi (Moulay Ismail University, Morocco); Abdelfatah El Oquadiki (Sidi Mohamed Ben Abdellah University, Morocco); Imane Hamza(Moulay Ismail University, Morocco)		
15:30-16:00	Coffee Break		

Session TT5-2	TT5- Communication Technologies and Researches -2 14:00-15:30	Hall (In-Person)	II
Chairs	Arman Fathollahi		
14:00-14:15	ID 41: RIS-Transmitter over Weibull Fading Channels; Mehmet Bilim (Niğde Ömer Halisdemir University, Türkiye)*; Yasin Kabalci (Niğde Ömer Halisdemir University, Türkiye)		
14:15-14:30	ID 118: Artificial Neural Networks Based Calibration Method for Six-Port Receiver; Nadia Chaghtmi (ESPRIT School of Engineering, Tunisia); Maha El Added(ESPRIT School of Engineering, Tunisia); Feten Teber(ESPRIT School of Engineering, Tunisia); Nouredine Boulejlene (Sousse Technopole, Tunisia)		
14:30-14:45	ID 163: Improved Reference-Point Algorithm for Multi-Criteria Decision-Making in Massive MIMO; Eni Haxhiraj (Polytechnic University of Tirana, Albania)*; Elson Agastra (Polytechnic University of Tirana, Albania)		
14:45-15:00	ID 366: Parallel GNSS Satellite Simulator for Real-Time Multi-GNSS Signal Generation; Yongtaek Hwang (Chungnam National University, South Korea); Jaeo Song (Chungnam National University, South Korea); Dohun Kim (Chungnam National University, South Korea); Hoyoung Yoo (Chungnam National University, South Korea)*		
15:00- 15:15	ID 434: Anomaly Detection Framework Using a Lightweight LSTM-Autoencoder Model for IoT Edge Devices; Imen Aouini (Esprit School of Engineering, Tunisia)*; Ameni Mersani (Esprit School of Engineering, Tunisia); Radhia elWerghemmi (Esprit School of Engineering, Tunisia)		
15:15-15:30	ID 446: Artificial-Noise-Aided Physical Layer Security in Fluid Antenna Systems Under Imperfect CSI: MMSE Estimation and Scaling-Error Analysis; Alperen Cengiz (Niğde Ömer Halisdemir University, Türkiye); Mehmet Bilim (Niğde Ömer Halisdemir University, Türkiye); Yasin Kabalci (Niğde Ömer Halisdemir University, Türkiye)		
15:30-16:00	Coffee Break		

Session TT3-2	TT3- Conventional and Renewable Energy -2 14:00-15:30	Hall (In-Person)	III
Chairs	Emanuele Fedele		
14:00-14:15	ID 55: End-to-End Validation of an IEC 61850-Based SCADA System Using Structured SCL Engineering and Secondary Injection Testing; Jorge Valencia-Maldonado (Universidad Politécnica Salesiana, Ecuador); Alesandro Saca-Segovia (Universidad Politécnica Salesiana, Ecuador); Mateo Quizhpi-Cuesta (Universidad Politécnica Salesiana, Ecuador); Flavio Quizhpi-Palomeque (Universidad Politécnica Salesiana, Ecuador)*		
14:15-14:30	ID 94: Electric Vehicle Charging Station Infrastructure Along the Trans Canada Highway with Solar PV Energy; Mugdho Rasheeq Aosaf (University of Michigan, USA)*; Christian M. Lastoskie (University of Michigan, USA)		
14:30-14:45	ID 164: Farm-level Renewable Microgeneration Optimisation Tool (FaRMOT): A Platform for Simulating Renewable Microgeneration on Dairy and Beef Farms; R.M. Kelum Sandamal (Munster Technological University, Ireland)*; Prabhathi Amanda Andrahennadi (Munster Technological University, Ireland); Darren J. Murphy (Munster Technological University, Ireland); John Upton (Teagasc Animal and Grassland Research and Innovation Centre, Ireland); Michael D. Murphy (Munster Technological University, Ireland)		
14:45-15:00	ID 283: Prediction the Performance of Glazed Transpired Air Solar Collector Under Jordan Climate; Safwan Al-Qawabah (Al-zaytoonah University of Jordan)*; Nabeel Abu Shaban (Al-zaytoonah University of Jordan); Otbeh Al-Oran (Applied Science Private University); Mohammad Fawaier (Amman Arab University, Jordan)		
15:00- 15:15	ID 320: Coordinated Optimization Framework for Frequency Deviation Minimization in Multi-Energy Systems; Jose Luis Rueda Torres (TU Delft, Netherlands); Harshit Nayak (TU Delft, Netherlands)*; Peter Palensky (TU Delft, Netherlands)		
15:15-15:30	ID 387: Intelligent Multi-Layer Control and Optimal Energy Management for Grid-Connected Hybrid PV-Wind Systems with Flywheel Storage; Rym Marouani (University of Tunis El Manar, Tunisia)*; Nejib Hamrouni (University of Tunis El Manar, Tunisia); Adnen Cherif (University of Tunis El Manar, Tunisia)		
15:30-16:00	Coffee Break		

<b>Session TT1-2</b>	<b>TT1- Power Electronics, Devices and Controllers – 2</b> 14:00-15:30	<b>Hall (Online)</b>	<b>IV</b>
<b>Chairs</b>	<b>Tiago Davi Curi Busarello</b>		
14:00-14:15	ID 159: Optimized Linear Control of a Single-Phase-Shift Dual Active Bridge using Reinforcement Learning; Azzeddine Amghar (Mohammed V University in Rabat, Morocco)*; Mohammed Ouassaid (Mohammed V University in Rabat, Morocco); Asmae Azzam Jai (Mohammed V University in Rabat, Morocco)		
14:15-14:30	ID 211: Reinforcement Learning-Based Intelligent Inverter Control for Harmonic Mitigation in Renewable-Integrated Microgrids with EV Charging Stations; Ozan Güll (Bingöl University, Türkiye)*		
14:30-14:45	ID 286: Design of Double-Gate MOSFET Based Differential Amplifier For Energy Conversion Systems (Differential Output and Active Load); Lwazi Luthuli (University of KwaZulu-Natal, South Africa); Tom Walingo (University of KwaZulu-Natal, South Africa); Viranjay M. Srivastava (Birmingham City University, UK)*		
14:45-15:00	ID 308: Intelligent Online Disturbance Learning Vector Control for Voltage Source Converters in Hybrid AC/DC Microgrids; Mustafa A. Kamooona (Universidad de Sevilla, Spain)*; Juan Manuel Mauricio (Universidad de Sevilla)		
15:00- 15:15	ID 338: Comparative Analysis of Direct and Indirect Current Control Strategies for Four-Wire Three-Phase Shunt Active Power Filters; Zaid H. Ali (Budapest University of Technology and Economics, Hungary); Ali M. Shakor (Gazi University, Türkiye)*; Dávid Raisz (Budapest University of Technology and Economics, Hungary)		
15:15-15:30	ID 378: Design and Comparative Analysis of LLC and LCC Resonant Converters for 800V/48V Electric Vehicle Auxiliary Power Modules (APM); Gül Nihan Okumus (Istanbul Technical University, Türkiye)*; Umutcan Polat (Istanbul Technical University); Deniz Yıldırım (Istanbul Technical University)		
15:30-16:00	Coffee Break		

<b>Session TT3-3</b>	<b>TT3- Conventional and Renewable Energy -3</b> 14:00-15:30	<b>Hall (Online)</b>	<b>V</b>
<b>Chairs</b>	<b>Ahmet Teke</b>		
14:00-14:15	ID 24: Modeling of Grid-Connected Solar Photovoltaic System with Battery Energy Storage; Peter Munyao Mutuku (University of KwaZulu-Natal, South Africa)*; Alan L. Leigh Jarvis (University of KwaZulu-Natal); Andrew G. Swanson (Stellenbosch University, South Africa); Mohamed F. Khan (University of KwaZulu-Nata, South Africa); Shaun V. Worthmann (Real Time Solar (Pty) Ltd., South Africa)		
14:15-14:30	ID 51: Dynamic Day-Ahead Performance Benchmarking of Hybrid Electrified Process Heat Generation for an Efficient Thermal Energy Supply; Markus Woerle (Technical University of Munich, Germany)*; Jan Geier (Technical University of Munich); Sarah Schoendorfer (Technical University of Munich); Moritz Eder (Technical University of Munich); Sarah Wagner (Technical University of Munich); Christina Reuter (TUM); Michael F. Zaeh (TUM)		
14:30-14:45	ID 80: A Feasibility Analysis of Sri Lanka's Transition to 100% Renewable Electricity Generation; Chatu Kalavithigoda (Teesside University, UK)*; Senthilarasu Sundaram (Teesside University, UK)		
14:45-15:00	ID 114: A Data-Driven Assessment Of Compressed Air System Health and Energy Savings Potential Based On Power Consumption During Idle States; Christian Wolf (University Stuttgart, Germany)*; Anna Harman (University of Stuttgart, Germany); Alexander Sauer (University of Stuttgart, Germany)		
15:00- 15:15	ID 169: Solar Power Generation Forecasting Using ARX Models with Meteorological Inputs; Cezara-Liliana Rat (Polytechnica University of Timisoara, Romania)*; Catalin Ichim-Burlacu (Polytechnica University of Timisoara, Romania); Diana Alina Bistriean (Polytechnica University of Timisoara); Ionel Muscalagiu (Polytechnica University of Timisoara)		
15:15-15:30	ID 267: Post-Fault Control of Integrated Energy Islands with Multi-Energy Interconnections; Junyan SHAO (Aalborg University, Denmark)*; Baoze Wei (Aalborg University, Denmark); Yajuan Guan (Aalborg University, Denmark); Juan C. Vasquez (Aalborg University, Denmark)		
15:30-16:00	Coffee Break		

16:00 – 17:00	<b>Keynote Session 2: Non–Terrestrial Networks (NTN): A Massive Infrastructure in Space and Near–Space for Connectivity and Beyond</b> Halim Yanikomeroglu, Carleton University, Ottawa, Canada  <b>Chair: Stanimir Valtchev</b>		
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<b>Session TT3-4</b>	<b>TT3- Conventional and Renewable Energy -4</b> 17:00-18:30	<b>Hall (In-Person)</b>	<b>I</b>
<b>Chairs</b>	<b>Emanuele Fedele</b>		
17:00-17:15	ID 456: A Hybrid SVM Approach for Dual-Inverter Open-End Winding PMSM Drives fed by Common DC-Link; Luca Di Cristo (University of Naples Federico II, Italy), Emanuele Fedele* (University of Naples Federico II, Italy); Bernard W. Steyaert (Columbia University, USA), Matthias Preindl (Columbia University, USA), Santolo Meo (University of Naples Federico II, Italy); Renato Rizzo (University of Naples Federico II, Italy)		
17:15-17:30	ID 126: Zero Voltage Switching Back-to-Back Converter for Wind Generators with Integrated Energy Storage; Salvatore Foti (University of Messina, Italy); Gioele Baia (University of Messina)*; Danilo Campagna (IUSS Pavia, Italy); Salvatore De Caro (University of Messina, Italy); Antonio Testa (University of Catania, Italy); Giacomo Scelba (University of Catania, Italy)		
17:30-17:45	ID 226: Cost-Optimal Fast Frequency Response Using Distributed Supercapacitor Energy Storage Systems: Dynamic Comparison of NSGA-II and PSO Representative Capacity Configurations; Bahattin Demirci (Istanbul Technical University, Türkiye)*; Mertcan Acar (Independent Researcher); Necati Aksoy (Bursa Technical University, Türkiye); Yuçel Aydın (Istanbul Technical University, Türkiye); İstemihan Genç (Istanbul Technical University, Türkiye)		
17:45-18:00	ID 280: Low-Complexity Price-Based Control Strategy for Residential PV–Battery Systems Using Low-Cost PLC Hardware; Jevgenijs Kozadajevs (Riga Technical university, Latvia)*; Artjoms Obusevs (Zurich University of Applied Sciences School of Engineering, Switzerland); Antans Saulius Sauhats (Riga Technical university, Latvia); Marks Losevs (Riga Technical university, Latvia)		
18:00-18:15	ID 305: Demand Response as a Competitiveness Lever for Zero-Emission Industrial Electrification: A Dutch Refinery Case Study; Hilde den Boer (TU Delft, Netherlands); David Sanchez Ortega (TU Delft, Netherlands)*; Peter Palensky (Tu Delft, Netherlands); Jose Luis Rueda Torres (TU Delft, Netherlands)		
18:15-18:30	ID 312: Constrained Temperature Regulation of Fuel Cells via Barrier and Lyapunov Functions; Michele Aicardi (DIBRIS-University of Genoa, Italy); Giulio Ferro (DIBRIS-University of Genoa, Italy)*; Michele Aicardi (DIBRIS-University of Genoa)		

Session TT5-3	TT5- Communication Technologies and Researches -3 17:00-18:30	Hall (In-Person)	II
<b>Chairs</b>	<b>Yasin Kabalci</b>		
17:00-17:15	ID 100: Tight Three-Coefficient Complementary Error Function Approximation with USRP-Based Experimental Validation for Nakagami-m Fading Channels; Alperen Cengiz (Niğde Ömer Halisdemir University, Türkiye), Mehmet Bilim (Niğde Ömer Halisdemir University, Türkiye), Yasin KABALCI (Niğde Ömer Halisdemir University, Türkiye)		
17:15-17:30	ID 346: Proactive AI-Based Anomaly Detection for supporting power grid Frequency Balancing using Radio Base Stations; Illyne Saffar (Ericsson, France)*; Lackis Elftheriadis (Ericsson, Sweden); Aurélie Boisbunon (Ericsson, France); Oleg Gorbatov (Ericsson, Sweden); Shruti Bothe (Ericsson, USA)		
17:30-17:45	ID 217: Low-Data Predictive Maintenance of Railway Station Doors and Elevators Using Bayesian Proxy Flow Modeling; Waldemar Bauer (AGH University of Krakow, Poland); Jerzy Baranowski (Akademia Górniczo-Hutnicza w Krakowie, Poland)*		
17:45-18:00	ID 341: Low-Latency QKD Protection of Synchrophasor Data Using a Low-Cost PMU; Mario Albanese (Forschungszentrum Jülich, Germany)*; Roua Hamila (RWTH Aachen University, Germany); Daniele Carta (Forschungszentrum Jülich, Germany); Ferdinanda Ponci (RWTH Aachen University, Germany); Andrea Benigni (Forschungszentrum Jülich, Germany)		
18:00-18:15	ID 396: Data-Driven SSO Identification by using 1D-ConvLSTM learning in Multi-Energy Systems, Estefania A. Tapia-Suarez (TU Delft, Netherlands)*; Jose Rueda Torres (TU Delft, Netherlands)		
18:15-18:30	ID 448: Physical Layer Security for Pinching Antenna Systems Under Outdated and Quantized CSI; Alperen Cengiz (Niğde Ömer Halisdemir University, Türkiye); Mehmet Bilim (Niğde Ömer Halisdemir University, Türkiye); Yasin Kabalci (Niğde Ömer Halisdemir University, Türkiye)		

Session SS	Special Session on Smart Grids and Energy Systems 17:00-18:30	Hall (Hybrid)	III
<b>Chairs</b>	<b>Ayse Kocalmis Bilhan</b>		
17:00-17:15	ID 75: Global Innovation Pathways and R&D Trends in Electricity Transmission System Operations; Ümit Çetinkaya (Turkish Electricity Transmission Corporation, Türkiye); Ozan Erdiñç (Yıldız Technical University, Türkiye)*; Elif Karanlık (KCA Cosultancy, Türkiye); F. Gülşen Erdiñç (Istanbul University-Cerrahpasa, Türkiye)		
17:15-17:30	ID 265: Economic MPC for Joint Dual-Storage TABS–Battery Co-Optimization in Grid-Connected Microgrids; Jael Koki (Tennessee State University, USA); Sagnika Ghosh (Tennessee State University, USA)*		
17:30-17:45	ID 194: Stability Analysis of Networked Control of Generator Excitation Control System; Ashraf Khalil (Technical University of Denmark ); Karam Elikar (Technical University of Denmark)		
17:45-18:00	ID 129 <b>[In-Person]</b> : Conditional Encoder-Decoder Transformer for Multi-Step Aero-Engine Transient Forecasting; Weiqun Fan (Chinese Academy of Science, China)*; Yafeng Shen (Chinese Academy of Science, China); Keqiang Miao ( Chinese Academy of Science, China); Xingen Lu (Chinese Academy of Science, China); Mingyang Zhou ( Chinese Academy of Science, China); Chunyan Hu (Chinese Academy of Science, China)		
18:00-18:15	ID 113 <b>[In-Person]</b> : New Formulations for Linear Optimal Power Flow with Topology Optimization; Juliane Siems (Forschungszentrum Jülich); Marc Hunkemöller (Forschungszentrum Jülich, Germany)*; Jan Lange (Forschungszentrum Jülich, Germany); Dirk Witthaut (Forschungszentrum Jülich, Germany); Lars Schewe (University of Edinburgh, UK); Nico Westerbeck (Eli Group, Belgium)		
18:15-18:30	ID 445: Towards Net-Zero Computing: Carbon-Aware Energy Scheduling for Data Centres; Awagan Goyal Ramesh Rao (Northumbria University, UK); Jing Jiang (Northumbria University, UK); Xuewu Dai (Northumbria University); Qiang Ni (Lancaster University); Hongjian Sun (Durham University)		

Session TT2-2	TT2- Electrical Machines and Drives – 2 17:00-18:30	Hall (Online)	IV
<b>Chairs</b>	<b>Mustafa Gokdag</b>		
17:00-17:15	ID 398: Rotor Time Constant Adaptation in Induction Motor Drives: A Comparison Between Harmonic Injection Based RTC Estimation and EKF-Based Physical Parameter Tracking; Uğur Körpe (Kirsehir Ahi Evran University, Türkiye)*; Mustafa Gökdağ (Karabuk University, Türkiye); Ozan Gülbudak (Karabuk University, Türkiye); Mehmet Akbaba (Karabuk University, Türkiye)		
17:15-17:30	ID 146: Comparative Performance for Consensus Multi-Motor PMSM Control Structure Based on Pareto Multi-Objective Optimization; Claudiu-Ionel Nicola (University of Craiova, Romania)*; Marcel Nicola (University of Craiova); Dan Selişteanu (University of Craiova); Camelia Marinescu ( ICMET Craiova)		
17:30-17:45	ID 347: Beyond Inrush Current: Experimental Study of Wound-Rotor Starting and Simulation-Based Analysis of VFD-Controlled Induction Motors; Vladimir Labovic (Purdue University Northwest, USA); Mihajlo Labovic (Purdue University Northwest, USA); Arash Asrari (Purdue University Northwest, USA)*		
17:45-18:00	ID 375: Battery State of Health Estimation Framework for EV Charging and Discharging Coordination Strategy; Sulaiman Alabbas (University of Pittsburgh, USA)*; Alexis Kwasinski (University of Pittsburgh, USA)		
18:00-18:15	ID 123: Robust Tracking Control of a Dual-rotor Unmanned Aerial Vehicle under Translational and Attitude Motion Dynamics Uncertainties; Hamed Nademi (California State University-San Marcos, USA)*; Anthony Nicklo (California State University-San Marcos, USA)		
18:15-18:30	ID 363: Microcontroller Implementation of Combined MTPA and LUT Correction of BLDC Motors with Large Stator Inductance and Hall Sensors Misalignment; Ryan Edric Nashota (University of British Columbia, Canada)*; Mark Phung (University of British Columbia, Canada); Juri Jatskevich (University of British Columbia, Canada)		

Session TT3-5	TT3- Conventional and Renewable Energy -5 17:00-18:30	Hall (Online)	V
<b>Chairs</b>	<b>Abdelrahman Karrar</b>		
17:00-17:15	ID 29: A Specialized Hybrid Genetic Algorithm to Solve the Transmission Expansion Planning Considering HVDC Lines and ESS; <i>Dany H. Huanca (Federal University of Rio de Janeiro, Brazil)*; DM Falcao (Federal University of Rio de Janeiro, Brazil)</i>		
17:15-17:30	ID 110: Progressive Hedging Augmentations for Stochastic Frequency-Constrained Unit Commitment; <i>Azeez O. Olasoji (University of Cape Town, South Africa)*; David T.O. Oyedokun (University of Cape Town, South Africa); Juan Esteban Sierra-Aguillar (Universidad de Antioquia, Colombia); Mohammad Rajbdori (Universidad Pontificia Comillas, Spain); Mkhutazi Mditshwa (University of Cape Town, South Africa); Chukwuemeka E. Okafor (University of Cape Town); Komla A. Folly (University of Cape Town)</i>		
17:30-17:45	ID 52: Modeling of The Corona Effect in Conductors Incorporating Ambient Temperature Effects; <i>Bryan Jara Cordova (Universidad Politécnica Salesiana, Ecuador); Jonnathan Matute Lojano (Universidad Politécnica Salesiana, Ecuador); Flavio Quizhpi Palomeque (Universidad Politécnica Salesiana, Ecuador)*; Mateo Quizhpi Cuesta (Universidad Politécnica Salesiana, Ecuador)</i>		
17:45-18:00	ID 139: Real-Time Hardware-in-the-Loop Control of a Virtual Power System Using Online Reinforcement Learning with Backend Threaded Optimization; <i>Richard Wiencek (Tennessee State University, USA)*; Sagnika Ghosh (Tennessee State University, USA)</i>		
18:00-18:15	ID 276: Comparison of the Breakdown Voltage of Mineral and Vegetable Oil Samples Subjected to Accelerated Thermal Aging; <i>Emiliy A. Villegas (Escuela Politécnica Nacional, Ecuador); Wilson A. Vasquez (Escuela Politécnica Nacional, Ecuador)*</i>		
18:15-18:30	ID 56: Conceptual Modeling and Methodology for the Development of a Digital Twin for Wind Power Generation; <i>Esteban Calle (Universidad Politécnica Salesiana, Ecuador); Marco Toledo (Universidad Politécnica de Valencia, Spain); Flavio Quizhpi (Universidad Politécnica Salesiana, Ecuador)*; René Barbecho Jarro (ELECAUSTRO, Ecuador); Samantha Suquilanda (Universidad Politécnica Salesiana, Ecuador); Felipe Peralta (Universidad Politécnica Salesiana, Ecuador)</i>		

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# IEEE GPECOM 2026 Programme

<b>CEST Time Zone</b>	<b>Thursday, June 4th</b>
08:30 – 09:00	Registration

<b>Session TT3-6</b>	<b>TT3- Conventional and Renewable Energy -6</b> 09:00-10:00	<b>Hall (In-Person)</b>	<b>I</b>
<b>Chairs</b>	<b>Ersan Kabalci</b>		
09:00-09:15	ID 190: Detection and Classification of Photovoltaic Module Defects Using Electroluminescence Imaging; Valentin Boicea (National University of Science and Technology Politehnica, Romania)*; Diana Enescu (University Valahia of Targoviste, Romania); Dorian Sidea (National University of Science and Technology Politehnica Bucharest, Romania); Paolo Di Leo (Politecnico di Torino, Italy); Giorgio Giacalone (Politecnico di Torino, Italy); Alessandro Ciocia (Politecnico di Torino, Italy)		
09:15-09:30	ID 302: Comparative Performance Analysis of GWO and P&O MPPT Methods Under Two Stage Partial Shading Conditions; Aynur Tuba Çakmak (Yildiz Technical University, Turkiye)*; Ali Rifat Boynueğri (Yildiz Technical University); Hayri Yigit (Yildiz Technical University, Turkiye)		
09:30-09:45	ID 331: Thermodynamic Performance of a PTSC-LHTES-ORC-HTHP Hybrid Energy System for Combined Power and Process Heat Production; Sercan Gülce Güngör (Firat University, Turkiye)*		
09:45-10:00	ID 449: Improving Small-Scale Electric Arc Detection in Railway Systems via Pantograph-Centered ROI Extraction; Ebrar Güzel (Yildiz Technical University, Turkiye)*, Yavuz Ateş (Yildiz Technical University, Turkiye)*		

<b>Session TT1-3</b>	<b>TT1 - Power Electronics, Devices and Controllers – 3</b> 09:00-10:00	<b>Hall (In-Person)</b>	<b>II</b>
<b>Chairs</b>	<b>Burak Tekgun</b>		
09:00-09:15	ID 40: Multi-Phase, Multi-chip DCDC Converter Control Architecture for High Power Applications; Puneet Sareen (Texas Instruments, Germany)*; Narayanan Seetharaman (Texas Instruments, Germany)		
09:15-09:30	ID 160: Reward-Guided Beam Search Algorithm for Electronic Routing in Wireless Power Transfer; Navjot Singh Badyal (University of Maryland Baltimore County, USA); Christopher Mullen (University of Maryland Baltimore County, USA); Soobum Lee (University of Maryland Baltimore County, USA)*		
09:30-09:45	ID 386: A Preliminary Study of Model Predictive Control of Permanent Magnet Assisted Maglev System; Alara Betül Ayhan (İstanbul Ticaret University, Turkiye)*; Kadir Erkan (Yildiz Technical University, Turkiye); Ahmet Fevzi Bozkurt (Istanbul Ticaret University, Turkiye)		
09:45-10:00	ID 427: Data-Driven SoH Estimation-Based Rotational Equalization for Battery Lifecycle Extension in CHB Systems; Eda Nur Çakiraslan (Abdullah Gul University, Turkiye); Semih Unal (Abdullah Gul University, Turkiye); Burak Tekgun (Abdullah Gul University, Turkiye)*; Ali Rifat Boynuegri (Yildiz Technical University, Turkiye)		

<b>Session TT4-3</b>	<b>TT4- Smart Grid Researches and Applications-3</b> 09:00-10:00	<b>Hall (In-Person)</b>	<b>III</b>
<b>Chairs</b>	<b>Stanimir Valtchev</b>		
09:00-09:15	ID 233: Evaluation of Different Household Types Using a MILP-Based Home Energy Management System for Post-Disaster Energy Resilience; Emir TUTUŞ (Manisa Celal Bayar University, Turkiye)*; Alper Kağan CANDAN (Manisa Celal Bayar University, Turkiye); Ali Rifat BOYNUEĞRİ (Yildiz Technical University, Turkiye); Nevzat ONAT (Manisa Celal Bayar University, Turkiye)		
09:15-09:30	ID 327: Post-Disaster Home Energy Management with Fuel Cell Vehicles: Evaluating Reinforcement Learning Against MILP Under Islanding Conditions; Mehmet Koruturk (Virginia Tech, USA)*; Alper Kagan Candan (Manisa Celal Bayar University, Turkiye); Ali Rifat Boynuegri (Yildiz Technical University, Turkiye); Nevzat Onat (Manisa Celal Bayar University)		
09:30-09:45	ID 28: Optimized Acceleration and Braking Dynamics of Heavy Mechanisms Transporting Liquid Loads; Stanimir Valtchev (FCT-UNINOVA-CTS, University NOVA of Lisbon and ISLA Santarem Polytechnic University, Portugal)*; Tatyana Sinyukova (Lipetsk State Technical University, Russian Federation); Alexey Sinyukov (Lipetsk State Technical University); Jose Goncalves (University of Namibe); Bruno Luis (FCT-UNINOVA-CTS University NOVA of Lisbon); Aurelian Craciunescu (University Polytechnica of Bucharest, Romania)		
09:45-10:00	ID 244: Post-Disaster Home Energy Management System for Residential Communities Using EV-Based Energy Transportation and Home Battery Coordination; Emir TUTUŞ (Manisa Celal Bayar University, Turkiye)*; Alper Kağan CANDAN (Manisa Celal Bayar University, Turkiye); Ali Rifat BOYNUEĞRİ (Yildiz Technical University, Turkiye); Nevzat ONAT (Manisa Celal Bayar University, Turkiye)		

10:00 – 11:00	<b>Keynote Session 3: Multi-Objective Optimization for Assessing Tradeoffs Between Energy Sharing and Ancillary Services in Local Energy Communities</b> Pierluigi Siano, University of Salerno, Italy  <b>Chair: Renato Rizzo</b>		
11:00-11:30	Coffee Break		

Session TT3-7	TT3- Conventional and Renewable Energy -7 11:30-13:00	Hall (In-Person)	I
Chairs	<b>Badrul Chowdhury</b>		
11:30-11:45	ID 256: Grid-Strength-Aware Placement of Distributed IBRs for Frequency Stability in Integrated T&D Networks; <i>Maria Islam (University of North Carolina at Charlotte, USA)*; Badrul Chowdhury (University of North Carolina at Charlotte, USA)</i>		
11:45-12:00	ID 153: Performance Comparison Study between Magnetostrictive and Piezoelectric Vibrational Energy Harvesters, <i>Soobum Lee (University of Maryland Baltimore County, USA)*; Jin Hyeong Yoo (Naval Surface Warfare Center, USA); Nicholas Jones (Naval Surface Warfare Center, USA); Henrik Struck (University of Maryland Baltimore County, USA)</i>		
12:00-12:15	ID 191: Fault analysis in a 10 MW wind farm with STATCOM, <i>Adrian-Valentin Boicea (National University of Science and Technology Politehnica Buchares, Romania)*; Diana Enescu (University Valahia of Targoviste, Romania); Alessandro Ciocia (Politecnico di Torino, Italy); Dorian Octavian Sidea (National University of Science and Technology Politehnica Bucharest, Romania)</i>		
12:15-12:30	ID 351: Performance of the First Transpired Solar Collector Installation in Jordan; <i>Mohammad Fawaier (Amman Arab University, Jordan)*; Nabeel Abu shaban (Al-Zaytoonah University, Jordan); Omar Alharasees (Jerash University, Jordan); Lafee Alshamaileh (Amman Arab University, Jordan); Liith Alhyari (Budapest University of Technology and Economics, Hungary); Balázs Bokor (Budapest University of Technology and Economics, Hungary)</i>		
12:30-12:45	ID 357: PAHM: A Multi-Stage Aware Hybrid Framework for Lithium-Ion Battery Degradation Modeling and EOL Prediction; <i>Ali TOPRAK (Yildiz Technical University, Istanbul Topkapi University, Turkiye)*; Ali Rifat BOYNUĞRİ (Yildiz Technical University, Turkiye); Altuğ BOZKURT (Yildiz Technical University, Turkiye)</i>		
12:45-13:00	ID 373: Reliability Parameters Modelling in Electric Power Grid Environment; <i>Stanimir Valtchev (University NOVA of Lisbon, Portugal)*; Renata Petrova (Kazan State Energy University, , Russian Federation); Elena Gracheva (Kazan State Energy University, , Russian Federation); Tatyana Sinyukova (Lipetsk State Technical University, , Russian Federation); Bruno Luís (University NOVA of Lisbon, Portugal); Jose Goncalves (University of Namibe, Angola)</i>		
13:00-14:00	Lunch Break		

Session TT2-3	TT2- Electrical Machines and Drives – 3 11:30-13:00	Hall (In-Person)	II
Chairs	<b>Nicola Campagna</b>		
11:30-11:45	ID 144: Machine Learning Benchmarking for Industrial Power Quality Anomaly Detection: Performance, Cost, and the Limits of Class Imbalance Mitigation; <i>Saurav Bhowmick (Hochschule Offenburg, Germany)*; Uchenna Johnpaul Aniekwensi (Hochschule Offenburg, Germany); Jörg Bausch (Hochschule Offenburg, Germany)</i>		
11:45-12:00	ID 234: Bayesian and Classical Feature Ranking for Interpretable BLDC Fault Diagnosis; <i>Waldemar Bauer (AGH University of Krakow, Poland); Jerzy Baranowski (AGH University of Krakow, Poland)*</i>		
12:00-12:15	ID 328: Comparative Electromagnetic Analysis of Outer Rotor BLDC Motor Considering Different Design Parameters; <i>Harun Emre Cinaroglu (Firat University, Turkiye); Merve Yıldırım (Firat University, Turkiye)*</i>		
12:15-12:30	ID 361: Motion Control of Electromechanical Driveline with Input Deadzone and Output Hysteresis; <i>Tamás Tóth-Katon (Budapest University of Technology and Economics, Hungary)*; Péter Dr. Stumpf (Budapest University of Technology and Economics, Hungary); Gergely Dr. Szabó (Budapest University of Technology and Economics, Hungary)</i>		
12:30-12:45	ID 409: Inter-Turn Short Circuit Fault Detection on Permanent Magnet Vernier Machines Through Stray Magnetic Flux; <i>Nazif Kerem Atar (Abdullah Gül University, Turkiye); Hasan Can Karatepe (Abdullah Gül University, Turkiye); Didem Tekgün (Abdullah Gül University, Turkiye)*</i>		
12:45-13:00	ID 316: Comparative Study of Signal Injection Methods for Encoderless Control of an Extra Low Voltage PMSM; <i>Najla Haje Obeid (IFP Energies Nouvelles, France)*; Hadj Ahmed Belghazali (IFP Energies Nouvelles, France); Eric Monmasson (CY Cergy Paris Université, France)</i>		
13:00-14:00	Lunch Break		

Session TT4- 4	TT4- Smart Grid Researches and Applications-4 11:30-13:00	Hall (Online)	III
Chairs	<b>Cezara-Liliana Rat</b>		
11:30-11:45	ID 176: Smart Roads Supplied with Renewable Energy; <i>Catalin Ichim-Burlacu (Polytechnica University of Timisoara); Cezara-Liliana Rat (Polytechnica University of Timisoara)*; Manuela Panoiu (Polytechnica University of Timisoara); Caius Panoiu (Polytechnica University of Timisoara)</i>		
11:45-12:00	ID 213: Vehicle to Microgrid Power Control Using Model Predictive Controller for Frequency Regulation; <i>Bouthaina EL BARKOUKI (Mohammed V University in Rabat, Morocco)*; Mohammed OUASSAID (Mohammed V University in Rabat, Morocco)</i>		
12:00-12:15	ID 258: Microgrid Digital Twin: An Overview of Concepts, Applications, and Future Directions; <i>Mouna EL Qasery (Mohamed V University, Morocco)*; Bouthaina El Barkouki (Mohamed V university); Mohamed Laamim (Green Energy Park Smart Grid Test Lab, Morocco); Ahmed Abbou (Mohamed V university); Lahoucine Id-khajine (Cy Cergy-Paris Satie Laboratory, France); Abdelilah Rochd (Green Energy Park Smart Grid Test Lab, Morocco)</i>		
12:15-12:30	ID 389: Stacking Ensemble Learning Framework for Electric Vehicle Charging Demand Prediction; <i>Engin Eyceyurt (Nevsehir University, Turkiye)*</i>		
12:30-12:45	ID 447: Deep Learning Models for Short-Term Photovoltaic Power Forecasting: A Comparative Study with Multi-Horizon Predictions; <i>Maissa Taktak (Leipzig University of Applied Sciences, Germany); Ahmed Fakhfakh (University of Sfax, Tunisia); Faouzi Derbel (Leipzig University of Applied Sciences, Germany)</i>		
12:45-13:00	ID 236: A Hybrid AI Model Based on Explainable Graph Transformers for Enhancing Financial Security and Operational Resilience in Banking Fraud Detection Systems; <i>Yousef Alasadi (Alkunoze University, Iraq), Hamid Ali Abed AL-Asadi, (University of Basrah, Iraq), Mithem Mohammed Ali Abdullah (University of Basrah, Iraq)</i>		
13:00-14:00	Lunch Break		

<b>Session TT1-4</b>	<b>TT1- Power Electronics, Devices and Controllers – 4</b> 11:30-13:00	<b>Hall (Online)</b>	<b>IV</b>
<b>Chairs</b>	<b>Ozan Gulbudak</b>		
11:30-11:45	ID 365: Recent Testing for Crosstalk Investigation on Stripline PCB Structures; Novelita Rahayu ( <i>Institut Teknologi Bandung, Indonesia</i> )*; Tri Desmana Rachmildha ( <i>Institut Teknologi Bandung, Indonesia</i> ); Levy Olivia Nur ( <i>Telkom University, Indonesia</i> ); Achmad Munir ( <i>Institut Teknologi Bandung, Indonesia</i> )		
11:45-12:00	ID 388: A Buck and Boost based Multi-Input Non-Isolated Microinverter for Solar Photovoltaic Application; Aaqib Ahmad Qureshi ( <i>Indian Institute of Technology Delh, India</i> )*; Gianluca Brando ( <i>University of Naples Federico II, Italy</i> ); Adolfo Dannier ( <i>University of Naples Federico II, Italy</i> ); Ivan Spina ( <i>University of Naples Federico II, Italy</i> ); Subhendu Dutta ( <i>Indian Institute of Technology Delh, India</i> )		
12:00-12:15	ID 416: Design, Loss Modeling, and Implementation of a 3.3-kW OBC for 380-V EV and ESS Battery Charging Applications; Venkatesh B ( <i>Indian Institute of Technology Madras, India</i> )*; N Lakshminarasamma ( <i>Indian Institute of Technology Madras</i> ); Ashok Jhunjhunwala ( <i>Indian Institute of Technology Madras, India</i> ); Kaushal Jha ( <i>CEET, India</i> ); Anitha Dhianeshwar ( <i>Flowtrik Technologies pvt ltd, India</i> ); Shanthi Jeyaseeli ( <i>Flowtrik Technologies pvt ltd, India</i> )		
12:15-12:30	ID 218: Data Driven TD3-Optimized Lyapunov Control for Synchronous Buck Converter; Ayham Khalil Salem Odeh ( <i>Karabuk University, Turkiye</i> )*; Ugur Ufuk Korpe ( <i>Kirsehir Ahi Evran University, Turkiye</i> ); Esmanur Kuru ( <i>Karabuk University, Turkiye</i> ); Mustafa Gokdag ( <i>Karabuk University, Turkiye</i> ); Ozan Gulbudak ( <i>Karabuk University, Turkiye</i> )		
12:30-12:45	ID 432: Nonlinear Power Flow Decoupling in QAB Converter; Sanam Mehar ( <i>University of Genova, Italy</i> )*; Andrea Formentini ( <i>University of Genova, Italy</i> ); Massimiliano Passalacqua ( <i>University of Genova, Italy</i> ); Mario Marchesoni ( <i>University of Genova, Italy</i> )		
12:45-13:00	ID 184: Comparative Performance Analysis of Type-I and Type-II Fuzzy Logic Controllers in Field-Oriented Control of Induction Motors; Mehmet GUVEREN ( <i>Nevsehir University, Turkiye</i> ) ; Aydin BOYAR ( <i>Nevsehir University</i> ); Ersan Kabalci ( <i>Nevsehir University</i> )*		
13:00-14:00	Lunch Break		

<b>Session TT3-8</b>	<b>TT3- Conventional and Renewable Energy -8</b> 11:30-13:00	<b>Hall (Online)</b>	<b>V</b>
<b>Chairs</b>	<b>Mihai Oproescu</b>		
11:30-11:45	ID 72: Design and Characterization of a Centimeter Scale Wind Turbine Inspired by the Indigenous Palosapis ( <i>Anisoptera thurifera</i> Blanco ( <i>Blume</i> )) Seed; Emmanuel Ralph R. Bengco ( <i>University of the Philippines Los Baños</i> )*; Gabriela Monica M. Gonzales( <i>University of the Philippines Los Baños</i> ); Ma. Danica C. Lebosada ( <i>University of the Philippines Los Baños</i> ); Nathanael E. Silava ( <i>University of the Philippines Los Baños</i> )		
11:45-12:00	ID 370: Impacts of Battery Energy Storage System for Energy Shifting on Generation Dispatch and Generation Cost of Sulutgo Power System, Indonesia; Armina Afriani ( <i>Institut Teknologi Sepuluh Nopember</i> )*; Vita Lystianingrum ( <i>Institut Teknologi Sepuluh Nopember</i> ); Ontoseno Penangsang ( <i>Institut Teknologi Sepuluh Nopember</i> )		
12:00-12:15	ID 152: Attention-Based Transformer Model for Inertia Estimation of Power Systems; Gulrez Khan Lodi ( <i>IIT Indore, India</i> )*; Dr. Trapti Jain ( <i>IIT Indore, India</i> )		
12:15-12:30	ID 156: Multi-objective Optimization of Generation Cost and Carbon dioxide Emission of a Converted Coal-Biomass Cofiring Power Plant using Non-dominated Sorting Genetic Algorithm II; John Crispin C. Ralota ( <i>University of the Philippines Los Baños</i> ); Adriane Joshua J. Miras ( <i>University of the Philippines Los Baños</i> ); Nathanael E. Silava ( <i>University of the Philippines Los Baños</i> )*; Julius Cesar P. Cunanan ( <i>University of the Philippines Los Baños</i> ); Elvin D. Dulce ( <i>University of the Philippines Los Baños</i> )		
12:30-12:45	ID 157: Reliability and Line Loading Impacts of STATCOM Integration in High PV Penetration IEEE RTS 24-Bus Systems; Laurent Lee M. Magat ( <i>University of the Philippines Los Baños</i> ); Elvin D. Dulce ( <i>University of the Philippines Los Baños</i> ); Erison R. Peñaflor ( <i>University of the Philippines Los Baños</i> ); Nathanael E. Silava ( <i>University of the Philippines Los Baños</i> )*		
12:45-13:00	ID 306: Stochastic Latency Compensation for Power Oscillation Damping in Generic Plant-Level Reactive Power Control; Umar Fitra Ramadhan ( <i>Kwangwoon University, South Korea</i> )*; Minhan Yoon ( <i>Kwangwoon University, South Korea</i> )		
13:00-14:00	Lunch Break		

14:00-15:00	<b>Industry Forum - II</b> <b>Moderator: Rosario Miceli</b> <b>– Multi-level EV traction Inverter utilizing GaN and SiC with Dynamic Slew-rate Control</b> Jaeun Cha, Infineon Technologies Americas Corp., USA <b>– Teaching Protection Engineering with High-Fidelity Digital Twins: Co-Simulation for Scalable, Reproducible Learning</b> Andrea Bonetti, Megger Sweden AB, Sweden Niclas Wetterstrand, Global Industry Director – Utilities Protection, Megger Group, Sweden		
15:00 – 16:00	<b>Keynote Session 4: Enabling Digital Twins in Power Electronics: Trends and Hardware Considerations; Tiago Davi Curi Busarello, Federal University of Santa Catarina, Brazil</b>  <b>Chair: Ersan Kabalci</b>		
16:00 – 16:30	Coffee Break		

Session TT3-9	TT3- Conventional and Renewable Energy -9 16:30-18:00	Hall (In-Person)	I
Chairs	Emanuele Fedele		
16:30-16:45	ID 372: Integration of Wind, Solar, and Multi-Storage Systems for Optimized Hybrid Power Performance; Rajesh Saiju (Flensburg University of Applied Sciences, Germany)*; Rania Boulaqitib (Flensburg University of Applied Sciences, Germany); Alexander Krogel (Schleswig Holstein Netz AG, Germany)		
16:45-17:00	ID 395: Taguchi Method and Grey Relational Analysis to Optimize the Performance of a Transpired Solar Collector; Nabeel Abu Shaban (Al-Zaytoonah University of Jordan)*; Rafiq Manna (Higher Colleges of Technology); Mohammad Fawaier (Amman Arab University); Shahnaz Alkhalil (Al-Zaytoonah University of Jordan)		
17:00-17:15	ID 404: A Redundant Control Framework for Power System Frequency Stability: Integrating Classical Controllers with Deep Learning - Based BiLSTM Networks; Bahattin Demirci (Istanbul Technical University, Turkiye)*; Necati Aksoy (Bursa Technical University, Turkiye); Mertcan Acar (Independent Researcher); Yu cel Aydin (Istanbul Technical University, Turkiye); Istemihan Genc (Istanbul Technical University, Turkiye)		
17:15-17:30	ID 249: Techno-Economic Comparison of Machine Learning and Heuristic Power Allocation Methods for Large-Scale Electrolyzer Systems; Hamed Nezhadkhatami (Aalborg University, Denmark)*; Amin Hajizadeh (Aalborg University, Denmark); Mohsen Soltani (Aalborg University, Denmark)		
17:30-17:45	ID 130: Attributing the Effects of Multiple Line Outages via Shapley Values; Sarah Schreyer (Forschungszentrum Jülich, Germany)*; Marc Hunkemöller (Forschungszentrum Jülich); Jan Lange (Forschungszentrum Jülich); Iva Bacic (Forschungszentrum Jülich); Philipp C. Böttcher (Forschungszentrum Jülich); Dirk Witthaut (Forschungszentrum Jülich); Johannes Kruse (Amprion GmbH, Transmission System Operation, Germany)		
17:45-18:00	ID 425: MPP and Non-MPP Operation of a Grid-Tied Solar Inverter for Independent Control of Two Subarrays; Ayush Chauhan (Indian Institute of Technology Delhi, India); Satyaveer Singh Rawat (Indian Institute of Technology Delhi, India)*; Subhendu Dutta (Indian Institute of Technology Delhi, India)		

Session TT5-4	TT5- Communication Technologies and Researches-4 16:30-18:00	Hall (Online)	II
Chairs	Asuman Savascihabes		
16:30-16:45	ID 385 [In-Person]: On the Quantization-Aware Training for Digital Semantic Speech Communications, Munif Zeybek (Ege University, Turkiye)*; Bilge Kartal Çetin (Ege University, Turkiye); Erkan Zeki Engin (Ege University, Turkiye)		
16:45-17:00	ID 297: Design and Implementation of a Secure Medical Image Compression-Encryption Scheme on Embedded Cluster Systems; Ahmed Bencherqui (Sidi Mohamed Ben Abdellah University, Morocco)*; Hamza Tahiri (Sidi Mohamed Ben Abdellah University); Mohamed Kmich (Sidi Mohamed Ben Abdellah University); Mohamed Amine Tahiri (Sidi Mohamed Ben Abdellah University); Mhamed Sayyouri (Sidi Mohamed Ben Abdellah University)		
17:00-17:15	ID 137: A Compact Open-Slotted Patch Antenna and Its MIMO Configuration for 5G and Future 6G Applications; Sanaa Iriqat (Al-Quds University, Palestine)*		
17:15-17:30	ID 168: Weather-Adaptive Multi-Agent Reinforcement Learning for Joint Channel and Power Allocation in Dual-Band V2X Networks; Rifatul Hassan Ritul (The University of Mississippi, USA)*; Mustafa M. Matalgah (The University of Mississippi, USA)		
17:30-17:45	ID 371: Impact of Anonymization Techniques for ViT-based Human Action Recognition; Doina Chiroiu-Jitianu (National University of Science and Technology POLITEHNICA Bucharest, Romania)*; Mihai Nan (National University of Science and Technology POLITEHNICA Bucharest, Romania); Irina Georgiana Mocanu (National University of Science and Technology POLITEHNICA Bucharest)		
17:45-18:00	ID 410: Discrete Energy Levels and Charge Transport in Quantum-Dot Single-Electron Transistors; Mohamed O. Koko (University of Tennessee at Chattanooga, USA); Raga Ahmed (University of Tennessee at Chattanooga, USA); Sharief Babikir (University of Tennessee at Chattanooga, USA)*		

Session TT4-5	TT4- Smart Grid Researches and Applications-5 16:30-18:00	Hall (Online)	III
Chairs	Gokturk Poyrazoglu		
16:30-16:45	ID 364: Time-Lagged Impact of Natural Gas Prices on Electricity Prices in Türkiye Using TimeMixer; Neva Yaren Bulut (Ozyegin University, Turkiye); Gokturk Poyrazoglu (Ozyegin University, Turkiye)*		
16:45-17:00	ID 230: Handling Imbalanced Data and Feature Selection for Operational Feasibility Assessment of Bidirectional Evs; Oguzhan Karahan (Istanbul Technical University, Turkiye)*; Ali Ozan (Istanbul Technical University, Turkiye); Mustafa Bagriyanik (Istanbul Technical University, Turkiye)		
17:00-17:15	ID 136: FIDVR Prediction and Severity Estimation from Operational Features; Yu Liu (University of Tennessee, USA)*; Yilu Liu (University of Tennessee, USA); Vahan Gevorgian (National Laboratory of the Rockies, USA)		
17:15-17:30	ID 290: AI-Driven Automatic Fault Detection and Classification in Smart Microgrids; Aravind Sanikommu (Arkansas State University, USA); Ehsan Naderi (Arkansas State University, USA)*		
17:30-17:45	ID 392: Computation and Enhancement of Power System Load Margin Using Griffon Vultures Optimization Algorithm; Murilo E. C. Bento (Federal University of Rio de Janeiro, Brazil)*		
17:45-18:00	ID 415: Computational Speed-up for Discretized State Space Systems using Modal Redundancy; Noman Saied (University of Tennessee at Chattanooga, USA)*; Abdelrahman Karrar (University of Tennessee at Chattanooga, USA)		

Session TT3-10	TT3- Conventional and Renewable Energy -10 16:30-18:00	Hall (Online)	IV
<b>Chairs</b>	<b>Ozan Gulbudak</b>		
16:30-16:45	ID 285: On Using Historical Data and Statistics to Determine the Load Factor of an Underground HVAC Cable: A Case Study; <i>Rodrigo Rozenblit Tiferes (University of São Paulo, Brazil)*; Giovanni Manassero Jr. (University of São Paulo, Brazil)</i>		
16:45-17:00	ID 65: Classification of Partial Discharge Patterns in Vegetable Oils using DBSCAN Clustering; <i>Oswaldo Sebastian Jimenez Quezada (Universidad Politécnica Salesiana, Ecuador); John Jairo Amurrio Loja (Universidad Politécnica Salesiana, Ecuador); Flavio Mateo Quizhpi Cuesta (Universidad Politécnica Salesiana, Ecuador); Flavio Alfredo Quizhpi Palomeque (Universidad Politécnica Salesiana, Ecuador)*</i>		
17:00-17:15	ID 203: Microcrack Detection in Photovoltaic Modules Using Electroluminescence Imaging and Vision Transformers; <i>Sanjay Raju (Stevens Institute of Technology, USA); Basil Reji (Northeastern University, USA)*; Jose Joseph Thandapral (Northeastern University); Nivedita Shainaj Nair (Northeastern University); Anita Acha George (Northeastern University); Amal Reji (University of Twente, Netherlands)</i>		
17:15-17:30	ID 210: Using AI for research in engineering: a study on Fuzzy Logic as an MPPT method for PV panels; <i>Catalin Ichim-Burlacu (Polytechnica University of Timisoara, Romania); Cezara-Liliana Rat (Polytechnica University of Timisoara)*; Manuela Panoiu (Polytechnica University of Timisoara); Caius Panoiu (Polytechnica University of Timisoara)</i>		
17:30-17:45	ID 413: Estimation of Fast Active Power Response in Mixed SG-MMC Networks via Artificial Neural Networks; <i>Monika Sharma (Delft University of Technology, Netherlands); Guus van Putten (Delft University of Technology); José Rueda Torres (Delft University of Technology)*; Jonathan Aviles-Cedeno (Delft University of Technology); Dong Liu (Delft University of Technology)</i>		
17:45-18:00	ID 204: Comparative Evaluation of YOLO Architectures for Microcrack Detection in Solar Panel Electroluminescence Images; <i>Basil Reji (Northeastern University, USA)*; Sanjay Raju (Stevens Institute of Technology, USA); Nivedita Shainaj Nair (Northeastern University, USA); Jose Joseph Thandapral (Northeastern University); Anita George (Northeastern University); Kevin Sani (Northeastern University)</i>		

Session SS1	SS1- Intelligent Control and Metaheuristic Optimization for Energy-Efficient Complex Systems 16:30-18:00	Hall (Online)	V
<b>Chairs</b>	<b>Ayse Kocalmis Bilhan</b>		
16:30-16:45	ID 22: A Predictive Voltage-SVPWM Grid-Forming Control Strategy for Islanded Microgrids; <i>Ammar Samir Abdelwahab (Budapest University of Economic and Technology, Hungary)*; Istvan Vokony (Budapest University of Economic and Technology)</i>		
16:45-17:00	ID 88: Optimal Placement of Distributed Generation Units Using a Modified Salp Swarm Algorithm; <i>Meriem M'dioud (Ibn Tofail University, Morocco); Youssef Er-Rays (Abdelmalek Essaadi University, Morocco); Abdelfettah Bannari (Sultan Moulay Slimane University, Morocco); Rachid Bannari (Ibn Tofail University, Morocco); Ismail El Kafazi (Moulay Slimane University, Morocco); Badre Bossoufi (Sidi Mohamed Ben Abdellah, Morocco)</i>		
17:00-17:15	ID 115: Event-Triggered Hierarchical Control for Hybrid AC/DC Microgrids with Communication-Aware Secondary Coordination; <i>Mustafa A. Kamoona (Universidad de Sevilla, Spain)*; Juan Manuel Mauricio (Universidad de Sevilla, Spain)</i>		
17:15-17:30	ID 155: CJAYA-Numerical Hybrid Optimization for High-Precision Parameter Estimation in Double-Diode Photovoltaic Models; <i>Ismail Abazine (Ibn Zohr University, Morocco)*; Imade Choulli (Ibn Zohr University); Abdelfattah Elhammoudy (Ibn Zohr University, Morocco); Driss Saadaoui (Ibn Zohr University, Morocco)</i>		
17:30-17:45	ID 133: Salp Swarm Algorithm-Based Optimization for Distributed Generation Placement; <i>Meriem M'dioud (Ibn Tofail University, Morocco); Youssef Er-Rays (Abdelmalek Essaadi University, Morocco); Abdelfettah Bannari (Sultan Moulay Slimane University, Morocco); Rachid Bannari (Ibn Tofail University, Morocco); Ismail El Kafazi (Moulay Slimane University, Morocco); Badre Bossoufi (Sidi Mohamed Ben Abdellah, Morocco)</i>		
17:45-18:00	ID 229: Harmonic State-Space Modeling and ANN-Enhanced Control of MMC-Based Unified Power Quality Conditioner for Medium-Voltage Distribution Networks; <i>Ahmad Aldiab (Chemnitz University of Technology, Germany)*</i>		
19:00-22:00	Gala Dinner		

# IEEE GPECOM 2026 Programme

CET Time Zone	Friday, June 5th
08:30 – 09:00	<b>Industry Forum – III</b> – <b>The Contribution of NIDEC–Motortecnica in the Developing of Hydropower for the Italian Green Energy Transition</b> Massimo Baret, C.E.O. NIDEC Motortecnica
09:00 – 10:00	<b>Keynote Session 5: AI-driven Networks, Architectures and Platforms for Advanced Energy Services</b> Alessandro Vizzari, University of Rome Tor Vergata, Italy <b>Chair: Renato Rizzo</b>
10:00 – 11:00	<b>Keynote Session 6: From Energy Transition to Accelerating Disturbances : Origins, Correlation and Mitigation</b> Srdjan Skok, University North, Croatia <b>Chair: Stanimir Valtchev</b>
11:00-11:30	Coffee Break

Session TT3-11	TT3- Conventional and Renewable Energy -11 11:30-13:00	Hall (In-Person)	I
Chairs	<b>Emanuele Fedele</b>		
11:30-11:45	ID 127: NSGA-II-Based Techno-Economic Optimization of SMR and PV Hybrid Systems; <i>Taylan Özgür Bilgiç (Istanbul Technical University, Turkiye)*; Belgin Türkay (Istanbul Technical University, Turkiye)</i>		
11:45-12:00	ID 238: Load Frequency Control in Isolated Microgrids with Pumped Hydroelectric Energy Storage, <i>Cenk Andic (Istanbul Technical University)*; İclal Aktaş (Istanbul Technical University, Turkiye); Taylan Özgür Bilgiç (Istanbul Technical University, Turkiye); Esra Aydın (Istanbul Technical University); Belgin Türkay (Istanbul Technical University)</i>		
12:00-12:15	ID 384: Simulation-Based Real-Time Analysis of Distribution Networks Under Renewable Energy Sources; <i>Ferhatcan Dumlu (Yıldız Technical University, Turkiye)*; Yavuz Ates (Yıldız Technical University, Turkiye); Ali Rifat Boyunegri (Yıldız Technical University, Turkiye)</i>		
12:15-12:30	ID 318: Economic and Resilience Analysis of a Grid-Connected Hybrid Microgrid with Energy Storage: A Case Study of Turkiye; <i>Esra Aydın (Istanbul Technical University, Turkiye)*; Belgin Turkey (Istanbul Technical University, Turkiye)</i>		
12:30-12:45	ID 436: Energetic and Thermal Performance Assessment of a PEM Utilized Reversible Fuel Cell through Electrochemical Model Calibration, <i>Petronilla Fragiaco (University of Calabria, Italy); Roberto Stefano Same (University of Calabria, Italy); Matteo Genovese (University of Calabria, Italy)*; Francesco Piraino (University of Calabria, Italy)</i>		
12:45-13:00	ID 394: Techno-Economic Comparison of Centralized and Distributed Photovoltaic Configurations for a University Building Cluster; <i>Esra Aydın (Istanbul Technical University, Turkiye)*; Nergis Çolak (Istanbul Technical University, Turkiye); Taylan Özgür Bilgiç (Istanbul Technical University, Turkiye); Cenk Andic (Istanbul Technical University, Turkiye); Belgin Türkay (Istanbul Technical University, Turkiye)</i>		
13:00-14:00	Lunch Break		

Session TT5-5	TT5- Communication Technologies and Researches-5 11:30-13:00	Hall (Hybrid)	II
Chairs	<b>Asuman Savaschabes</b>		
11:30-11:45	ID 333: Experimental Evaluation of Switched Beam Antenna Performances Fed by Butler Matrix; <i>Achmad Munir (Institut Teknologi Bandung, Indonesia); Fakhruddin Ahmad Nasution (Institut Teknologi Bandung, Indonesia)*; Zulfi (Telkom University Bandung, Indonesia)</i>		
11:45-12:00	ID 344: Incorporation of Slit Upon Radiating Patch of Aperture Coupled Microstrip Antenna for Circular Polarization Enhancement; <i>Muhammad Farhan Maulana (Telkom University, Indonesia); Muhamad Roihan (Telkom University, Indonesia); Rizki Surya Permana (Telkom University, Indonesia); Rheyuniarto Sahlendar Asthan (Institut Teknologi Sumatera, Indonesia)*; Mohammad Ridwan Effendi (Institut Teknologi Bandung, Indonesia); Achmad Munir (Institut Teknologi Bandung, Indonesia)</i>		
12:00-12:15	ID 362: Ground-Switch Technique for Switching Radiated Beam of Fractal Microstrip Antenna; <i>Suprayogi (Telkom University, Indonesia); Bambang Sumajudin (Telkom University, Indonesia); Novelita Rahayu (Institut Teknologi Bandung, Indonesia)*; Achmad Munir (Institut Teknologi Bandung, Indonesia)</i>		
12:15-12:30	ID 90: A Robust Authentication Framework for Secured Message Transmission in Uncrewed Aerial Vehicles; <i>Esraa' Talab (University of Basrah, Iraq); Zaid Ameen Abduljabbar (University of Basrah)*; Hamid Ali Abed AL-Asadi (University of Basrah); Vincent Omollo Nyangaresi (University of Science and Technology, Kenya); Abdulla J. Y. Aldarwish (University of Basrah); Iman Qays Abduljaleel (University of Basrah); Ali Hasan Ali (University of Debrecen, Hungary); Noor Kareem (University of Basrah); Zahraa Abdullah Ali (ALKunooze University)</i>		
12:30-12:45	ID 345: Impact of YIG Incorporation on Radiation Performances of Magneto-Dielectric-based Microstrip Square Patch Antenna; <i>Rheyuniarto Sahlendar Asthan (Institut Teknologi Bandung)*; Agus Dwi Prasetyo (Institut Teknologi Bandung); Junas Haidi (Institut Teknologi Bandung); Asep Sofwan Faturahman Alqap (University of Bengkulu); Mohammad Ridwan Effendi (Institut Teknologi Bandung); Achmad Munir (Institut Teknologi Bandung)</i>		
12:45-13:00	ID 339 <b>[In-person]</b> : Low-RCS Drone Detection Based on Range-Gated Cyclic Features in Pulsed LFM Radar; <i>Murat KUZ (Ege University, Turkiye)*; Bilge KARTAL ÇETİN (Ege University, Turkiye)</i>		
13:00-14:00	Lunch Break		

<b>Session TT3-12</b>	<b>TT3- Conventional and Renewable Energy - 12</b> 11:30-13:00	<b>Hall (Hybrid)</b>	<b>III</b>
<b>Chairs</b>	<b>Ozgur Celik</b>		
11:30-11:45	ID 314: A Generic Plant-Level Frequency Control Framework for Grid-Following Systems: Grid Linearization and Stability Evaluation; Umar Fitra Ramadhan (Kwangwoon University, South Korea)*; Minhan Yoon (Kwangwoon University, South Korea)		
11:45-12:00	ID 376: Experimental Robust MPPT Optimization for DFIG Generators under Stochastic Wind Conditions Using a dSPACE Platform; Abdelfatah El ouadiki (Sidi Mohamed Ben Abdellah University, Morocco); Mohammed Taoussi (Moulay Ismail University, Morocco)*; Mohammed Es-salmi (Sidi Mohamed Ben Abdellah University); Imane Hamza (Moulay Ismail University)		
12:00-12:15	ID 296: Simulation-Based Photovoltaic Production Data for Training Data-Driven PV Power Forecasting Models; Raimondo Gallo (Politecnico di Torino, Italy); Marco Castangia (Politecnico di Torino, Italy); Andrea Canfora (FiberCop, Italy); Alberto Macii (Politecnico di Torino, Italy); Alessandro Aliberti (Politecnico di Torino, Italy)*; Edoardo Patti (Politecnico di Torino, Italy)		
12:15-12:30	ID 275: Efficient Framework for Predicting Renewable Energy using Transformer Model and Dynamic Feature Learning; Aws Abdullillah Hussein (Al-Iraqia University, Iraq); Fadhel Jumaa (Al-Furat Al-Awsat Technical University, Iraq); Abdullah Abid (Al-Iraqia University, Iraq); Anas Fouad Ahmed Ahmed (Al-Iraqia University, Iraq)*		
12:30-12:45	ID 412: SSLO-Based Coordinated Allocation of EV Charging Stations, Multi-Type Distributed Generation, and DSTATCOM in Radial Distribution Systems; Ali Selim (University of Jaen, Spain)*; Salah Kamel (Aswan University, Egypt); Francisco Jurado (University of Jaen, Spain)		
12:45-13:00	ID 422: Neural State Estimation for Multi-Operator Power Systems with Fragmented Observability; Anass Akaouche (Delft University of Technology, Netherlands); Jonathan Aviles-Cedeno (Delft University of Technology)*; José Rueda Torres (Delft University of Technology)		
13:00-14:00	Lunch Break		

<b>Session TT2-4</b>	<b>TT2- Electrical Machines and Drives – 4</b> 11:30-13:00	<b>Hall (Online)</b>	<b>IV</b>
<b>Chairs</b>	<b>Loffi Saidi</b>		
11:30-11:45	ID 317: Comparative Analysis of Load Losses and No-Load Losses of Dry-Type Distribution Transformers under TEDAŞ Standards; Kamran Dawood (Astor Enerji, Turkiye)*; Furkan Gezer (Astor Enerji, Turkiye); Semih Tursun (Astor Enerji, Turkiye)		
11:45-12:00	ID 9: Application of Active Disturbance Rejection Control to Power Generated by DFIG in Wind Turbine System; Abdel Ghani AISSAOUI (University of Bechar, Algeria)*; Ahmed Tahour (ESSA of Tlemcen, Algeria); Mohamed ABID (Djilali Liabes University, Algeria); Mohammed Kendzi (Salhi Ahmed University Naama, Algeria)		
12:00-12:15	ID 271: AI-Driven Proactive Maintenance Scheduling for Power Transformers Using Physics-Informed Deep Learning and Economic Optimization; Adila El Maghraoui (University Mohammed VI Polytechnic, Morocco)*; Oussama Laayati (Mohammed VI Polytechnic University, Morocco); Hicham El Hadraoui (Mohammed VI Polytechnic University, Morocco); Younes Ledmaoui (Hassania School of Public Works(EHTP), Morocco); Ahmed Chebak (Mohammed VI Polytechnic University, Morocco)		
12:15-12:30	ID 368: Design and Practical Implementation of Sensorless Control for Permanent Magnet Wind Turbine System; Arsene Ibisan Mambu (Technical University of Denmark); Ashraf Khalil (Technical University of Denmark)*; Sam Roozbehani (Technical University of Denmark)		
12:30-12:45	ID 450: Nonlinear Adaptive Filtering Disturbance Observer for Real-Time PMSM Drives; Çağatay Dursun (Akim Metal Ind.&Trade Inc., Turkiye)*; Selin OZCIRA OZKILIC (Yildiz Technical University, Turkiye)		
12:45-13:00			
13:00-14:00	Lunch Break		

<b>Session TT1-5</b>	<b>TT1 - Power Electronics, Devices and Controllers – 5</b> 14:00-15:30	<b>Hall (In-Person)</b>	<b>I</b>
<b>Chairs</b>	<b>Arman Fathollahi</b>		
14:00-14:15	ID 74: A Safety Control Approach for State-Constrained Nonlinear Systems; Ridvan Keskin (Zonguldak Bülent Ecevit University, Turkiye)*		
14:15-14:30	ID 93: Load Frequency Control of a Renewable-Based Power System with Battery Energy Storage Using a PID-TID Controller Optimized by the I-GWO Algorithm; Ikram Znati (Mohammed V University, Morocco)*; Mohammed Ferfra (Mohammed V University, Morocco); Abdessamade Bouaddi (Mohammed V University, Morocco)		
14:30-14:45	ID 165: Optimization of MPPT-Based Model Predictive Control for Hybrid PV Grid-Connected Systems; Muhammad Ishaq (University of Campania Luigi Vanvitelli, Italy)*; Ahmed Bilal Awan (Ajman University, UAE); Kifayat Ullah (University of Campania Luigi Vanvitelli); Muhammad Hammad Afzal (COMSATS University Islamabad, Pakistan)		
14:45-15:00	ID 257: A Current Source Three-Phase Rectifier for Bipolar DC Distribution Grids; Daniel Foito (Polytechnic University of Setúbal, Portugal)*; Armando Cordeiro (Polytechnic University of Lisbon, Portugal); J. Fernando Silva (University of Lisbon, Portugal); Victor Fernando Pires (Polytechnic University of Setúbal, Portugal)		
15:00- 15:15	ID 310: Digital Twin Design and Experimental Validation of Step-Down DC/DC Converters in Power-to-Hydrogen Systems; Emil Dalgas Thre (Aarhus University, Denmark); Arman Fathollahi (Aarhus University, Denmark)*; Claudio Gomes (Aarhus University, Denmark); Björn Andresen (Aarhus University, Denmark)		
15:15-15:30	ID 356: New Control System Blocks that Damp the Vibrations of the Flexibly Suspended Load; Stanimir Valtchev (University NOVA of Lisbon, Portugal)*; Tatyana Sinyukova (Lipetsk State Technical University, Russia); Alexey Sinyukov (Lipetsk State Technical University, Russia); Elena Gracheva (Kazan State Energy University, Russia); Bruno Luis (University NOVA of Lisbon, Portugal); Jose Goncalves (University of Namibe, Angola)		
15:30-16:00	Coffee Break		

<b>Session TT3-13</b>	<b>TT3- Conventional and Renewable Energy -13</b> 14:00-15:30	<b>Hall (In-Person)</b>	<b>II</b>
<b>Chairs</b>	<b>Alessandro Vizzarri</b>		
14:00-14:15	ID 128: Scenario-Based Performance Analysis for Design Selection in Grid-Connected Rooftop PV Systems; Taylan Özgür Bilgiç (Istanbul Technical University, Türkiye)*; İbrahim Aydın (Istanbul Technical University, Türkiye); Esra Aydın (Istanbul Technical University, Türkiye); Cenk Andıç (Istanbul Technical University, Türkiye); Belgin Turkay (Istanbul Technical University, Türkiye)		
14:15-14:30	ID 67: Comparison of Meta-Heuristic Algorithms for the Optimal PMU Placement; Umut Emre UZUN (Zonguldak Bulent Ecevit University, Türkiye)*; Alper Kagan CANDAN (Manisa Celal Bayar University, Türkiye); Ali Rifat BOYNUEGRI (Yıldız Technical University, Türkiye); Nihat PAMUK (Zonguldak Bulent Ecevit University, Türkiye)		
14:30-14:45	ID 237 : All Energy Storage Systems for Load Frequency Control in Isolated Microgrids; Cenk Andıç (Istanbul Technical University, Türkiye)*; Berfin Yıldız (Istanbul Technical University, Türkiye); Ali Öztürk (Duzce University, Türkiye); Belgin Türkay (Istanbul Technical University, Türkiye)		
14:45-15:00	ID 405 : A Novel Control Strategy to Operate SPV and Battery Integrated Current-fed DAB Based Inverter with a Grid Frequency Unfolding Stage, Ayush Chauhan (Indian Institute of Technology Delhi, India)*; Chinmay Das (Indian Institute of Technology Delhi, India); Subhendu Dutta (Indian Institute of Technology, India)		
15:00- 15:15	ID 173 : SiC-Based Single-Phase Transformerless Grid-Tied Inverter with Enhanced PLL Control; Ersan Kabalıcı (Nevşehir Hacı Bektaş Veli University, Türkiye)*		
15:15-15:30	ID 143: Current Sharing and Safe Operation in Multi-Parallel Connected Converters via CLF-CBF-QP Safety-Critical Control; Ridvan Keskin (Zonguldak Bulent Ecevit University, Türkiye)*		
15:30-16:00	Coffee Break		

<b>Session TT4-6</b>	<b>TT4- Smart Grid Researches and Applications-6</b> 14:00-15:30	<b>Hall (Online)</b>	<b>III</b>
<b>Chairs</b>	<b>Asuman Savaschabes</b>		
14:00-14:15	ID 259: Hybrid Microgrid Control with SAC-RL and Forecast Optimization for Battery and Hydrogen Systems; Mouna EL Qasery (Mohamed V University, Morocco)*; Mounia Achraoui (Mohamed V University, Morocco); Naoual Bekkioui (Mohamed V University, Morocco); Lahoucine Id-khajine (Cy Cergy-Paris Satie Laboratory, France); Ahmed Abbou (Mohamed V University, Morocco)		
14:15-14:30	ID 91: LSTM-Based Detection of Non-Technical Losses in Smart Distribution Networks Using Real Smart Meter Data; Celal Ateşşahin (Dicle University, Türkiye); Hüseyin Acar (Dicle University); Cem Haydaroglu (Dicle University)*		
14:30-14:45	ID 183: Challenges and Opportunities in Romania's Energy Transition: The Role of Smart Grid Infrastructure; Cezara-Liliana Rat (Polytechnica University of Timisoara, Romania)*; Catalin Ichim-Burlacu (Polytechnica University of Timisoara); Marcel Topor (Polytechnica University of Timisoara); Sorin Deaconu (Polytechnica University of Timisoara)		
14:45-15:00	ID 221: Coordinated Energy Management of Aircraft-to-Grid and Fixed Storage in a Solar-Powered Airport Microgrid; Berkay Güzel (Yıldız Technical University, Türkiye); Edanur Taş (Yıldız Technical University); Benu Prencuva (Yıldız Technical University); Ayşe Kübra Tatar (Yıldız Technical University)*; Ozan Erdinç (Yıldız Technical University); Sergio F.Santos (University of Beira Interior, Portugal); Joao P.S. Catalao (SYSTEC-ARISE, Portugal)		
15:00- 15:15	ID 352: Evaluating Automated Electric Vehicles in Sustainable Urban Mobility Planning: A Novel Multi-Criteria Approach; Omar Alharasees (Jerash University, Jordan); Haiham A. Al Hasanat (Amman Arab University, Jordan); Mohammad Fawaier (Amman Arab University)*; Lafee Alshamaileh (Amman Arab University)		
15:15-15:30	ID 443: Deployment Readiness Assessment of Large Language Models in Power Distribution Systems: A Risk-Aware Framework; Seda Kul (Karamanoglu Mehmetbey University, Türkiye), Bilgehan Arslan (Gazi University, Türkiye), Seyit Alperen Celtek (Karamanoglu Mehmetbey University)		
15:30-16:00	Coffee Break		

<b>Session TT5-6</b>	<b>TT5- Communication Technologies and Researches-6</b> 14:00-15:30	<b>Hall (Online)</b>	<b>IV</b>
<b>Chairs</b>	<b>Mehmet Onur Kök</b>		
14:00-14:15	ID 95: Anonymous Authentication Architecture for Enhanced Security in Wireless Medical Sensor Networks; Noor Kareem (University of Basrah, Iraq); Zaid Ameen Abduljabbar (University of Basrah)*; Vincent Omollo Nyangaresi (Odinga University of Science and Technology, Kenya); Hamid Ali Abed AL -Asadi (University of Basrah); Abdulla J. Y. Aldarwish (University of Basrah); Iman Qays Abduljaleel (University of Basrah); Ali Hasan Ali (University of Debrecen, Hungary); Esraa' Talab (University of Basrah); Zahraa Abdullah Ali (ALkunooze University, Iraq)		
14:15-14:30	ID 334: Performance Evaluation on Chipless RFID Tag Based on Reflective LTC Polarization Converter; Dwi Andi Nurmatris (Telkom University, Indonesia)*; Radial Anwar (Telkom University, Indonesia); Achmad Munir (Institut Teknologi Bandung, Indonesia)		
14:30-14:45	ID 325: SDR-Based LoRa Sensing for Occupancy Detection and Device-Free Human Activity Recognition Using High-Rate Chirp Emulation; M.Talha DOGAN (Firat University, Türkiye); Muhammed Furkan KÜÇÜK (Firat University, Türkiye)*		
14:45-15:00	ID 354: Single-Stage GaN Power Amplifier Design for WiMAX at 3.5 GHz with EM Simulation; Mehmet Onur Kök (Nevşehir Hacı Bektaş Veli Üniversitesi, Türkiye)*		
15:00- 15:15	ID 307: Efficient and Robust Beam Pattern Synthesis for Real-Time Phased Array Antenna based on Physics-Guided Deep Neural Network and Attention Techniques; Aymen Khaleel (Al-Iraqia University); Mohsin Ali Ahmed (Al-Ma'moon University, Iraq); Ahmed Sabah Noori (Al-Iraqia University, Iraq); Anas Fouad Ahmed Ahmed (Al-Iraqia University)*		
15:15-15:30	ID 343: An Efficient and Robust Hybrid Model for SAR and Optical Remote Sensing Image Denoising and Classification; Ahmed Talal Kamil (Al-Iraqia University, Iraq); Ali Jasim Ghafoori (Al-Ma'moon University College, Iraq); Ali N. Kareem (University of Technology, Iraq); Hussein M. Hussein (Ninevah University, Iraq); Anas Fouad Ahmed Ahmed (Al-Iraqia University)*		
15:30-16:00	Coffee Break		

<b>Session TT3-14</b>	<b>TT3- Conventional and Renewable Energy -14</b> 14:00-15:30	<b>Hall (Online)</b>	<b>V</b>
<b>Chairs</b>	<b>Saffet Ayasun</b>		
14:00-14:15	ID 269: Learning-Assisted Optimization of Planning and Operation in Wind-Hydrogen Power Systems; <i>Faudyarsa Fitra Wiratama (TU Delft, Netherlands); Fernando Ivan Canales Verdial (TU Delft, Netherlands)*; Jose Luis Rueda Torres (TU Delft, Netherlands)</i>		
14:15-14:30	ID 337: Stability Delay Margin Computation of Microgrid with Superconducting Magnetic Energy Storage using Rekasius Method; <i>Ali M. Shakor (Gazi University, Turkiye)*; Zaid H. Ali (Budapest University of Technology and Economics, Hungary); Saffet Ayasun (Gazi University, Turkiye)</i>		
14:30-14:45	ID 214: Comparative Evaluation of Model-Free and Model-Based RL Agents for Robust EV Load Scheduling in Renewable-Dominated Microgrids; <i>Ozan Gül (Bingol University, Turkiye)*</i>		
14:45-15:00	ID 455: Impact of Wind Integration into Duqm Area in Oman With Grid Code Compliance; <i>Ahmet Onen (UDST, Qatar), Hassan Ali (UDST, Qatar), Ahmad Awad (UDST, Qatar), Abdullah Albadi (SQU, Oman), Sultan Alrawahi (OETC, Oman), Maktoum Alhosani (OETC, Oman)</i>		
15:00-15:15	ID 353: Integration of Hybrid Renewable Energy Sources with Battery Energy Storage Systems for Peak Load Shaving: A MATLAB/Simulink Model; <i>Kamaludeen Musbahu (Necmettin Erbakan University, Turkiye); Semih Sadi Kilic (Ministry of Energy and Natural Resources, Turkiye); Sinan Yigit (Necmettin Erbakan University, Turkiye)*</i>		
15:15-15:30	ID 35: A Multi-Dimensional Framework for Evaluating Energy Community Readiness in Türkiye, <i>Ozan Erdinç (Yıldız Technical University, Turkiye)*</i>		
15:30-16:00	Coffee Break		

<b>Session TT3-15</b>	<b>TT3- Conventional and Renewable Energy -15</b> 16:00-17:30	<b>Hall (Hybrid)</b>	<b>I</b>
<b>Chairs</b>	<b>Mihai Oproescu</b>		
16:00-16:15	ID 73: Harmonic and Sub/Interharmonic Parameter Estimation Based on Dhole Optimization Algorithm; <i>Melih Çoban (Bolu Abant İzzet Baysal University, Turkiye)*</i>		
16:15-16:30	ID 79: Demand-Side Management Based on Fuzzy Logic for Multi-Energy Communities with Hybrid Storage Coordination; <i>Pablo Horillo-Quintero (University of Cadiz, Spain)*; Pablo García-Triviño (University of Cadiz); David Carrasco-González (University of Cadiz); Luis M. Fernández-Ramírez (University of Cadiz)</i>		
16:30-16:45	ID 166: AI-Enhanced Optimal Power Flow Modeling for PV-Integrated Low-Voltage Grids; <i>Yassin Saad (German International University, Egypt)*; Salma Elsheri (German University in Cairo, Egypt); Yasmine Zaghloul (German International University, Egypt)</i>		
16:45-17:00	ID 202: The Modelling the Savonius Turbine Using Numerical Methods; <i>Cezara-Liliana Rat (Polytechnica University of Timisoara, Romania)*; Catalin Ichim-Burlacu (Polytechnica University of Timisoara); Marcel Topor (Polytechnica University of Timisoara); Octavian Prostean (Polytechnica University of Timisoara)</i>		
17:00-17:15	ID 326: Sobel-Enhanced Lightweight CNN for Real-Time Industrial Defect Detection on Embedded Edge Platforms; <i>Hakan TATAR (Firat University, Turkiye); Muhammed Furkan KÜÇÜK (Firat University, Turkiye)*</i>		
17:15-17:30	ID 220 <b>[In-person]</b> : Recent Power Converters Utilized In Data Center Power Systems; <i>Ersan Kabalci (Nevsehir Haci Bektas Veli University, Turkiye)*</i>		

<b>Session TT4-7</b>	<b>TT4- Smart Grid Researches and Applications-7</b> 16:00-17:30	<b>Hall (Hybrid)</b>	<b>II</b>
<b>Chairs</b>	<b>Mehmet Bilim</b>		
16:00-16:15	ID 246: Assessment of Load Conformity Factors for Separating Voltage and Load Generated Harmonic Components; <i>Matheus Branco Arcadepani (São Paulo State University (UNESP), Brazil)*; Alexandre Candido Moreira (Universidade Federal de São João del Rei (UFSJ), Brazil); Eduardo Veri Liberado (São Paulo State University); Bruno Oliveira Zarpellon (São Paulo State University (UNESP)); Luis De Oro Arenas (São Paulo State University); Helmo K. Morales Paredes (São Paulo State University (UNESP))</i>		
16:15-16:30	ID 154: An Estimation and Error Based Protection Method for Inverter-Dominated AC Microgrids; <i>Behzad A. M. Alizadeh (Toronto Metropolitan University, Canada)*; Mohammadreza F. M. Arani (Toronto Metropolitan University, Canada)</i>		
16:30-16:45	ID 418: Griffon Vultures Optimization Algorithm Applied to the Design of Resilient Wide-Area Damping Controllers; <i>Murilo E. C. Bento (Federal University of Rio de Janeiro, Brazil)*</i>		
16:45-17:00	ID 433: DEPQD-F: A Deployable and Explainable Framework for Power Quality Disturbance Classification in Smart Grids; <i>Bilgehan Arslan (Gazi University, Turkiye); Seda Kul (Karamanoglu Mehmetbey University, Turkiye)*; Seyit Alperen Celfek (Karamanoglu Mehmetbey University, Turkiye)</i>		
17:00-17:15	ID 438: Design and Implementation of Export-Limiting Control for Inverter-Based DERs; <i>Rezeq Direya (RWTH Aachen University, Germany)*; Ferdinanda Ponci (RWTH Aachen University, Germany); Antonello Monti (RWTH Aachen University, Germany)</i>		
17:15-17:30	ID 134: Real-time Intelligent Physical Rehabilitation and Movement Quality Assessment: An Edge-AI Powered Multi-Wearable Devices in Healthcare Fusion Framework; <i>Noor Ali Jakhim (University of Basrah, Iraq); Hamid Ali Abed AL-Asadi (University of Basrah, Iraq)*; Zaid Ameen Abduljabbar (University of Basrah); Mohammed Adnan Saihood (University of Basrah); Vincent Omollo Nyangaresi (Odinga University of Science and Technology, Kenya); Baneen Nizar Abdul Hussein (University of Basrah, Iraq)</i>		

Session TT3-16	TT3- Conventional and Renewable Energy -16 16:00-17:30	Hall (Hybrid)	III
<b>Chairs</b>	<b>Mustafa Gokdag</b>		
16:00-16:15	ID 287: Frequency-Constrained Unit Commitment Using SODE-Labelled Affine Surrogates; Azeez O. Olasoji (University of Cape Town, South Africa)*; David T.O Oyedokun (University of Cape Town, South Africa); Mohamad Rajabdorri (Universidad Pontificia Comillas, Spain); Juan Esteban Sierra-Aguillar (Universidad de Antioquia, Colombia); Chukwuemeka E. Okafor (University of Cape Town, South Africa); Mkhutazi Mditshwa (University of Cape Town South Africa); Komla A. Folly (University of Cape Town)		
16:15-16:30	ID 335: Coordination Methods for Distance Protection and Inverse-Time Overcurrent Devices; Ivan Burdukov (Juru Ltd.)*		
16:30-16:45	ID 242: A Systematic Analysis of Methods for Augmenting the Performances of the Savonius Turbine; Catalin Ichim-Burlacu (Polytechnica University of Timisoara, Romania); Cezara-Liliana Rat (Polytechnica University of Timisoara)*; Manuela Panoiu (Polytechnica University of Timisoara); Caius Panoiu (Polytechnica University of Timisoara)		
16:45-17:00	ID 383: 4E Analysis and Optimization Methods in Solar Hybrid Systems: Current Status, Challenges, and Future Directions; Sadeq Sha'bani (Shahid Beheshti University, Iran); Paria Qolamzadeh (Shahid Beheshti University, Iran); Zahra Piryaei (Shahid Beheshti University, Iran); Aslan Gholami (Shahid Beheshti University, Iran); Roghayeh Gavagsaz-Ghochani (Shahid Beheshti University, Iran); Matheepot Phattanasak (King Mongkut's University of Technology North Bangkok, Thailand)*		
17:00-17:15	ID 429: Performance Assessment of Transmission and Distribution Networks under High Renewable Distributed Generation; Andi Hida (Polytechnic University of Tirana, Albania)*; Rajmonda Bualoti (Polytechnic University of Tirana)		
17:15-17:30			

Session TT1-6	TT1 - Power Electronics, Devices and Controllers – 6 16:00-17:30	Hall (Online)	IV
<b>Chairs</b>	<b>Tiago Davi Curi Busarello</b>		
16:00-16:15	ID 399: Online Estimation of Rotor Time Constant, Magnetizing Inductance, and Rotor Resistance in M2PC Controlled Induction Motors Using Double-MRAS; Uğur Körpe (Kirsehir Ahi Evran University, Türkiye)*; Mustafa Gökdağ (Karabuk University, Türkiye); Ozan Gülbudak (Karabuk University, Türkiye); Mehmet Akbaba (Karabuk University, Türkiye)		
16:15-16:30	ID 451: Investigating the Influence of Temperature and Gate Resistance on SiC MOSFET Performance; Muhammad Muzammil Farooqi (University of Palermo, Italy)*; Michele Calabretta (University of Messina, Italy); Angelo Alberto Messina (STMicroelectronics, Italy); Cinzia Muriana (University of Palermo, Italy); Filippo Pellitteri (University of Palermo, Italy); Rosario Miceli (University of Palermo, Italy)		
16:30-16:45	ID 400: Active Damping Integrated Modulated Model Predictive Control for LCL-Filtered Grid-Connected Active Front-End Rectifier; Alaa Ibrahim (Karabuk University, Türkiye)*; Uğur Ufuk Körpe (Kirsehir Ahi Evran University, Türkiye); Mustafa Gökdağ (Karabuk University); Ozan Gülbudak (Karabuk University)		
16:45-17:00	ID 453: Generalized N-Phase Averaged Modeling of Interleaved Buck Converters applied to Electrolyzer Systems for Hydrogen Production; Teresa Vitturi (University of Palermo, Italy); Muhammad Muzammil Farooqi (University of Palermo, Italy); Rosalinda Inguanta (University of Palermo, Italy); Alessandro Mazzola (University of Palermo, Italy); Filippo Pellitteri (University of Palermo, Italy)*; Rosario Miceli (University of Palermo, Italy)		
17:00-17:15	ID 367: Analytical Impedance-Based Modeling of Multiple Grid-Forming Converter-Interfaced Resources for Transient Analysis of Microgrids; Fardin Sohel (University of British Columbia, Canada)*; Arash Safavizadeh (University of British Columbia, Canada); Shadman Saqlain Rahman (University of British Columbia, Canada); Juri Jatskevich (University of British Columbia, Canada)		
17:15-17:30			
17:30-18:00	Closing Ceremony		