

Wednesday, September 18

8:00 – 8:45	Registration	
8:45 – 9:00	Welcome Address	
9:00 – 10:40	Voltage and Current Sensors (Chair: Roberto Tinarelli)	
9:00	Low-Cost High-Performance Generator for Testing Current Transformers Based on Frequency-Domain Feedback	Marco Faifer; Christian Laurano; Roberto Ottoboni; Sergio Toscani
9:25	Inductive Voltage Transformer Behaviour in the Frequency Range from 9 kHz up to 150 kHz	Gabriella Crotti; Giovanni D'Avanzo; Antonio Delle Femine; Daniele Gallo; Domenico Giordano; Claudio Iodice; Palma Sara Letizia; Carmine Landi; Mario Luiso; Daniele Palladini
9:50	A Low-Cost Measurement Setup to Test Low-Power Instrument Transformers in the 9 kHz - 150 kHz Frequency Range	Christian Betti; Alessandro Mingotti; Roberto Tinarelli; Lorenzo Peretto
10:15	Flexible Generation Architecture for Current Transformers Testing up to 150 kHz	Gabriella Crotti; Giovanni D'Avanzo; Antonio Delle Femine; Daniele Gallo; Domenico Giordano; Claudio Iodice; Carmine Landi; Palma Sara Letizia; Mario Luiso; Daniele Palladini; Davide Signorino
10:40 – 11:10	Coffee Break	
11:10 – 12:25	Power Quality Measurements I (Chair: Johan Rens)	
11:10	Time-Domain Power Theory Applied to Waveform Distortion Assessment of AC Railways	Andrea Mariscotti; Rafael S. Salles; Sarah Rönnerberg
11:35	Analysis of AC oscillations in a DC smart grid	Davide Signorino; Daniele Gallo; Antonio Delle Femine; Eric Armando; Julio J. Melero; Juan Pérez-Aragüés; Domenico Giordano
12:00	Feasibility of IEC 61000-4-7 Class I gapless implementation of harmonics measurement on low-cost microcontroller device	Giovanni Artale; Dario Di Cara; Antonio Cataliotti; Valentina Cosentino; Vito Ditta; Salvatore Guaiana; Nicola Panzavecchia; Giovanni Tinè
12:25 – 13:30	Lunch Break	
13:30 – 14:00	Patron Presentation	
14:00 – 15:15	Measurement Data Analytics (Chair: Daniele Carta)	
14:00	Estimation of the LV power profiles variability using the Goodness of Fit approach	Anca Petruta Brincoveanu; Efstathios Fiorentis; Radu Plamanescu; Ana Maria Dumitrescu; Mihaela Albu
14:25	Utilizing Matrix Profile for Enhanced Detection of Events in Sampled Values	Paolo Castello; Davide Sitzia; Sara Sulis; Guglielmo Frigo
14:50	Validating Inertia Assessment Metrics in Distribution Systems with High RES Penetration	Theresa Joubert; Johan Rens; Guglielmo Frigo; Virginia Negri; Alessandro Mingotti; Roberto Tinarelli; Lorenzo Peretto
15:15 – 15:45	Coffee Break	
15:45 – 17:25	Power System Monitoring (Chair: Marco Pau)	
15:45	Accuracy of Electricity Metering and Monitoring Devices under Industry-Typical Operating Conditions	Michael Freiburg; Matthias Schmidt; Xiaofei Guo; Lukas Johannes Christ; Felix Hackeloeer; Robin Abraham
16:10	Design of an Experimental Setup for Generating Electric Vehicle Charging Data Sets	Stefano Rinaldi; Marco Pasetti; Alessandro Musatti; Salvatore Dello Iacono; Davide Astolfi; Alessandra Flammini
16:35	Comparative Analysis of SoC Estimation in Batteries using SFRA and EIS	Alessio Miele; Michele Vitelli; Alessandro Sardellitti; Filippo Milano; Mario Molinaro; Luigi Ferrigno; Fabrizio Ciancetta; Simone Mari
17:00	The Impact of Wind Farm Flicker on Transformer Gassing	Jean Fivaz; Johan Rens
18:00	Wine Masterclass	

Thursday, September 19

9:00 – 10:40	Phasor Measurement Units and Advanced Power System Measurements (Chair: Sergio Toscani)	
9:00	PMU implementation using IEC61850 Sampled Values implemented in a CPC platform	Anibal Antonio Prada Hurtado; Mario Mañana; Maria Teresa Villén Martínez; Miguel Ángel Oliván; Eduardo Martínez Carrasco; Carlos Rodríguez Del Castillo
9:25	Adaptive Filtering Based on Normalized Time Scale for the Measurement of Phasors in Short Intervals	Gerd Bumiller; Lukas Duhme
9:50	Frequency Measurement in Power Systems: Accuracy of Classical Electronic and Signal-processing-based Instrumentation	Daniel Belega; Gabriel Gasparesc
10:15	Ringdown Electromechanical Oscillations Analysis Through the Interpolated DFT Algorithm	Guglielmo Frigo; Paolo Attilio Pegoraro; Sergio Toscani
10:40 – 11:10	Coffee Break	
11:10 – 12:25	Distributed Measurement Systems: Architectures and Applications (Chair: Stefano Rinaldi)	
11:10	Fault Identification Method in Three-Phase Distribution Networks Leveraging Traceable PMU Measurements	Paolo Attilio Pegoraro; Carlo Sitzia; Antonio Vincenzo Solinas; Sara Sulis; Daniele Carta; Andrea Benigni
11:35	A Data Communication Redundant Solution based on RF and PLC Systems for Smart Grid Applications	Salvatore Guaiana; Giovanni Artale; Antonio Cataliotti; Valentina Cosentino; Dario Di Cara; Vito Ditta; Giovanni Tinè; Nicola Panzavecchia
12:00	Towards the DT of an educational building: an AI-based distributed measurement system for the power forecasting	Virginia Negri; Samuel Zanella; Alessandro Mingotti; Roberto Tinarelli; Lorenzo Peretto; Francesco Barchi; Andrea Acquaviva
12:25 – 13:30	Lunch Break	
13:30 – 15:10	Power Quality Measurements II (Chair: Jan Meyer)	
13:30	Comparison of Measurement Methods for the Assessment of RMS Spectra in the 9-150 kHz Range	Alexander Gallarreta; Jon González-Ramos; Javier Vildósola; Igor Fernandez Perez; Itziar Angulo; David de la Vega; Amaia Arrinda
13:55	Higher-Order Statistics Extension to Three-phase Systems in the Power Quality Framework	Michele Zanoni; Riccardo Chiumeo; Liliana Tenti; Massimo Volta
14:20	Comparison between Quality Index and Total Vector Error Metric for Power Quality Measurements	Lukas Duhme; Gerd Bumiller
14:45	Inter-Laboratory Comparison of Reference Systems for DC Power Quality Measurements	Guglielmo Frigo; Davide Signorino; Ronald van Leeuwen; Domenico Giordano; Daniele Gallo; Antonio Delle Femine; Helko E. van den Brom
15:10 – 15:40	Coffee Break	
15:40 – 16:55	Machine Learning and Artificial Intelligence for Power System Measurements (Chair: Mihaela Albu)	
15:40	On the quality of pseudo-measurements for Distribution System State Estimation	Manuela Pasella; Andrea Benigni; Barbara Cannas; Daniele Carta; Carlo Muscas; Fabio Pisano
16:05	Temperature-based Accuracy Estimation on Instrument Transformers via Neural Networks and Microcontrollers	Virginia Negri; Alessandro Mingotti; Roberto Tinarelli; Lorenzo Peretto
16:30	Data-Driven Anomaly Detection for Smart Energy Meters	Sina Ronaghi; Alessandro M Ferrero; Simona Salicone; Harsha Vardhana Jetti
19:30	Gala Dinner	

Friday, September 20

9:00 – 10:40	State Estimation (Chair: Valentina Cosentino)	
9:00	Benefits of Allocation Factor Pseudo-Measurements on AF-WLS Distribution Grid Monitoring	Marco Pau; Paolo Attilio Pegoraro
9:25	Randomised Sampling-based False Data Injection Attacks against Power System State Estimators	Debottam Mukherjee
9:50	Influence of measurement uncertainty of Power Quality instruments on Harmonic State Estimation	Ana M Blanco; Jan Meyer; Marco Lindner
10:15	Design and Analysis of an Incremental Meter Placement Algorithm for Distribution Grids	Marco Pau; Paolo Attilio Pegoraro
10:40 – 11:10	Coffee Break	
11:10 – 12:25	Signal Processing for Power System Measurements (Chair: Paolo Castello)	
11:10	Towards a Coordinated Spectral Support Estimation of Sinusoidal Disturbances in Smart Grids through Synchronized Measurements	David Macii; Paolo Attilio Pegoraro; Carlo Sitzia
11:35	Ip-DFT based on Polynomial Interpolation and Newton-Raphson: A Multifrequency Estimation Alternative for Zero-Padding and Window Function Independence	Cesar Andres Cazal; Luca Tari; Mirko Ginocchi; Ferdinanda Ponci; Antonello Monti
12:00	Compressive Sensing Taylor-Fourier Multifrequency Approach for Three-Phase Signals	Daniel Belega; David Macii; Dario Petri
12:25 – 12:45	Closing Ceremony	