

IEEE AMPS 2012

International Workshop on Applied Measurements for Power Systems

Aachen, Germany, September 26-28, 2012

Wednesday, September 26

8:30 – 9:00 Registration		
9:00 – 10:15 Opening session		
9:00		Welcome address
9:15	Douglas Wilson (Psynmetrix Ltd)	<i>Keynote speech: The role of Wide Area Monitoring in Facing Today's Energy Challenges</i>
<i>10:15 – 10:45 Coffee break</i>		
10:45 – 12:45 Measurement of nonsinusoidal quantities I (Chair: A. Ferrero)		
10:45	Helmo K.M. Paredes Fernando Marafão Paolo Mattavelli Paolo Tenti	<i>Application of Conservative Power Theory to Load and Line Characterization and Revenue Metering</i>
11:15	Matilde Apraiz Julio Barros Ramón I. Diego Andoni Lazkano	<i>A new method for real-time detection of transient disturbances in low-voltage supply systems</i>
11:45	Ljubica Koleva Dimitar Taskovski Aleksandar Milchevski Vladimir Dimchev	<i>Application of near perfect reconstruction filter banks in power quality disturbances classification methods</i>
12:15	Jiri Drapela Jan Slezinger	<i>Design and Utilization of a Light Flickermeter</i>
<i>12:45 – 14:15 Lunch</i>		
14:15 – 16:15 Phasor Measurement Units (Chair: M. Albu)		
14:15	Andrew Roscoe Ibrahim Abdulhadi Graeme Burt	<i>Filters for M class Phasor Measurement Units</i>
14:45	Junqi Liu Fei Ni Paolo Attilio Pegoraro Ferdinanda Ponci Antonello Monti Carlo Muscas	<i>Fundamental and Harmonic Synchrophasors Estimation using Modified Taylor-Kalman Filter</i>
15:15	Grazia Barchi David Macii Dario Petri	<i>Effect of Transient Conditions on DFT-based Synchrophasor Estimator Performance</i>
15:45	Paolo Castello Paolo Ferrari Alessandra Flammini Carlo Muscas Stefano Rinaldi	<i>An IEC 61850-compliant distributed PMU for electrical substations</i>
<i>16:15 – 16:45 Coffee break</i>		
16:45 – 18:15 Power system state and mode estimation (Chair: R. Langella)		
16:45	Gabriele D'Antona Mehdi Davoudi	<i>Effect of Phasor Measurement Unit on Power State Estimation Considering Parameters Uncertainty</i>
17:15	Marco Pau Paolo Attilio Pegoraro Sara Sulis	<i>Branch Current State Estimator for Distribution System based on Synchronized Measurements</i>
17:45	Luigi Vanfretti Sebastian Bengtsson Vedran S. Perić Jan Gjerde	<i>Effects of Forced Oscillations in Power System Damping Estimation</i>

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Thursday, September 27

9:00 – 11:00 Measurements on power system components I (Chair: A. Monti)		
9:00	Isabel Maria Moreno-Garcia Antonio Moreno-Munoz Francisco Domingo-Perez Rafael Real-Calvo	<i>Smart Grid Inverter Interface: Statistical approach applied to event detection</i>
9:30	Vladimir Ermel Johann Meisner Michael Kurrat Martin Kahmann	<i>Discriminative Acquisition of Power IGBT Low Rate Transients</i>
10:00	Lorenzo Peretto Roberto Tinarelli Maria Gabriella Masi	<i>On the Frequency Response of Semiconductive Shields for Power Systems Applications</i>
10:30	Ana Maria Dumitrescu Mihaela Albu	<i>Robustness against measurement component for controllers in LV active filters</i>
11:00 – 11:30 Coffee break		
11:30 – 13:00 Measurements on power generation systems (Chair: R. Tinarelli)		
11:30	Gabriele D'Antona Paolo Pennacchi Claudio Pensieri Carlo Rolla	<i>Turboalternator Shaft Voltage Measurements</i>
12:00	Karl Nienhaus Marc Hilbert	<i>Thermal Analysis of a Wind Turbine Generator by Applying a Model on Real Measurement Data</i>
12:30	Roberto Ferrero Giovanni Dotelli Paola Gallo Stampino Saverio Latorrata	<i>Discussion of Critical Measurement Issues of Impedance Spectroscopy on PEM Fuel Cells</i>
13:00 – 14:30 Lunch		
14:30 – 16:30 Measurement of nonsinusoidal quantities II (Chair: P. Tenti)		
14:30	Luigi Feola Roberto Langella Alfredo Testa	<i>On the Effects of Interharmonic Distortion on Measurement Instruments Based on PLL Systems</i>
15:00	Jan Slezinger Jiri Drapela	<i>An Alternative Flickermeter Evaluating High-Frequency Interharmonic Voltages</i>
15:30	Daniele Clerici Loredana Cristaldi Alessandro M Ferrero Marco Prioli	<i>The impact of electrical disturbances on the casting of an arc furnace</i>
16:00	Jani Valtari Pekka Verho	<i>Method to Increase Sampling Frequency by Merging Multiple Measurements</i>
16:30 – 17:00 Coffee break		
17:00 – 18:00 Panel session (Chair: L. Peretto)		
Project of a new IEEE Standard <i>Measurements on Electric Power Systems: uncertainty evaluation and expression</i>		
20:00 Social Dinner		

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Friday, September 28

9:00 – 11:00 Measurements on power system components II (Chair: J. Barros)		
9:00	Gabriele D'Antona Morris Brenna Nicola Manta	<i>Modeling and Measurement of the Voltage Transients at the Phase to Phase Changeover Section of the Italian High Speed Railway System</i>
9:30	Gaetano Pasini Alberto Ariatta Lorenzo Peretto	<i>Method and measurement set up for the evaluation of the performance of UPS output in the presence of network outages</i>
10:00	Sanja Veleva Danco Davcev Vlastimir Glamocanin	<i>Dynamic QoS and QoE Balancing Model for Smart Home Energy Management Systems</i>
10:30	Heiko Maass Hueseyin Kemal Çakmak Wolfgang Suess Alexander Quinte Wilfried Jakob Karl-Uwe Stucky Uwe Kuehnappel	<i>Introducing the Electrical Data Recorder as a New Capturing Device for Power Grid Analysis</i>
<i>11:00 – 11:30 Coffee break</i>		
11:30 – 13:00 Communication infrastructures and measurement transducers (Chair: C. Muscas)		
11:30	Davide Della Giustina Paolo Ferrari Alessandra Flammini Stefano Rinaldi	<i>Experimental Characterization of Service Latency over Broadband Power Line in Medium Voltage Grid</i>
12:00	Giovanni Artale Antonio Cataliotti Valentina Cosentino Dario Di Cara Pierluca Russotto Riccardo Fiorelli Giovanni Tinè	<i>Secondary substation power line communications for medium voltage smart grids</i>
12:30	Jigou Liu	<i>Error Compensation of Closed Loop Hall Effect Current Sensors</i>