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**Chair(s): Eduard Muljadi, Ion Boldea**

<b>A Hybrid Adaptive Fuzzy Control Strategy for DFIG-Based Wind Turbines with Super-Capacitor Energy Storage to Realize Short-Term Grid Frequency Support .....</b>	1914
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<b>Bootstrap Prediction Interval Estimation for Wind Speed Forecasting .....</b>	1919
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<b>Direct Active and Reactive Power Regulation of A DFIG based Wind Power System with Constant Switching Frequency and Reduced Ripple .....</b>	1932
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**Chair(s): Josep Gurrero, Houshang Karimi**

<b>Assessment of Sensorless Kalman Filter-Based Dual-Loop Control Strategies for Grid-Connected VSIs with LCL Filters .....</b>	1940
H.M. El-Deeb, A. Massoud, A.S. Abdel-Khalik, S. Ahmed	
Qatar University, Qatar; Texas A&M University at Qatar, Qatar	

<b>Geometric Analysis of Grid-Connected VSI with LCL-Filter using Poincaré Map .....</b>	1948
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Queen's University, Canada	

<b>Interaction and Aggregated Modeling of Multiple Paralleled Inverters with LCL Filter .....</b>	1954
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Aalborg University, Denmark	

<b>Measurement Results and Performance Analysis of the Grid Impedance in Different Low Voltage Grids for a Wide Frequency Band to Support Grid Integration of Renewables .....</b>	1960
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## **Session 32(B22): Solar PV in Grids and Microgrids I**

**Chair(s): Behrooz Mirafzal, Majid Pahlevaninejad**

- ΔP – ΔQ Area Assessment of Temporary Unintentional Islanding with P/f and Q/V Droop Controlled PV Generators in Distribution Networks .....** 1968  
Stefano Lissandron, Riccardo Sgarbossa, Luca Dalla Santa, Paolo Mattavelli, Roberto Turri, Alberto Cerretti  
University of Padova, Italy; ENEL Spa, Italy
- Locking Frequency Band Detection Method for Grid-Tied PV Inverter Islanding Protection .....** 1976  
Iman Mazhari, Hamidreza Jafarian, Babak Parkhideh, Saurabh Trivedi, Shibashis Bhowmik  
University of North Carolina, United States; SineWatts Inc., United States
- Synchronous PV Support to an Isolated Power System .....** 1982  
Daniel Remon, Antoni M. Cantarellas, Mohamed Atef Elsayed, Cosmin Koch-Ciobotaru, Pedro Rodriguez  
Abengoa Research, Spain; Technical University of Catalonia, Spain
- Reactive Power Management for Overvoltage Prevention at High PV Penetration in Low Voltage Distribution System .....** 1988  
Ali Safayet, Poria Fajri, Iqbal Husain  
North Carolina State University, United States

## **Session 33(E13): Capacitor Based Converters**

**Chair(s): Robert Pilawa, Olivier Trescases**

- A Central Capacitor Partial Power Processing DC/DC Converter .....** 1995  
Mengxing Chen, Feng Gao, Tingting Yang  
Shandong University, China; State Grid Chongqing Electric Power Company, China
- Automatic Current Sharing Mechanism in the Series Capacitor Buck Converter .....** 2003  
Pradeep S. Shenoy, Orlando Lazaro, Mike Amaro, Ramanathan Ramani, Wlodek Wiktor,  
Brian Lynch, Joseph Khayat  
Texas Instruments, United States
- Multi-Cell DC-DC Converter with High Step-Down Voltage Ratio .....** 2010  
Gabriel Tibola, Jorge L. Duarte, Andrei Blinov  
Eindhoven University of Technology, Netherlands; KTH Royal Institute of Technology, Sweden
- A High-Power-Density Wide-Input-Voltage-Range Isolated DC-DC Converter having a MultiTrack Architecture .....** 2017  
Minjie Chen, Khurram K. Afridi, Sombuddha Chakraborty, David J. Perreault  
Massachusetts Institute of Technology, United States; University of Colorado-Boulder, United States;  
Texas Instruments, United States

## **Session 34(E23): Grid-Tied Single-Phase Converters III**

**Chair(s): Henry Chung, Ali Khajehhossini**

- A Time-Sharing Principle-Based Current-Fed ZCS High-Frequency Resonant Self-Commutated Inverter for Inductive Power Transfer .....** 2027  
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Université de Technologie de Belfort-Montbéliard, France; University of the South Pacific, Fiji; ISSIA-CNR, Italy;  
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Université de Technologie de Belfort-Montbéliard, France; University of the South Pacific, Fiji; ISSIA-CNR, Italy;  
University of Picardie Jules Verne, France

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