Best Paper Award - Monday Sessions:

• **Oliver Knecht** - Comparative Evaluation of a Triangular Current Mode (TCM) and Clamp-Switch TCM DC-DC Boost Converter

• **Dong Jiang** and **Zewei Shen** - Paralleled Inverters with Zero Common-Mode Voltage

• **Ying Huang, Chun-Yuen Lai, Song Xiong, Siew-Chong Tan** and **Shu Yuen (Ron) Hui** - Non-Isolated High-Step-Up Resonant DC/DC Converter

• **Cristian Blanco, Francesco Tardelli, David Diaz, Pericle Zanchetta** and **Fernando Briz** - Design of a Cooperative Voltage Harmonic Compensation Strategy for Islanded Microgrids Combining Virtual Admittances and Repetitive Controllers

• **Christophe Cyusa, Simba** and **Yasutaka Fujimoto** - Pre-Drive Test of an Implemented Novel Radial-Gap Helical ROTLIN Machine

• **Ping-Heng Wu, Yuh-Tyng Chen** and **Po-Tai Cheng** - The Delta-Connected Cascaded H-Bridge Converter Application in Distributed Energy Resources and Fault Ride Through Capability Analysis
Best Paper Award - Tuesday Sessions:

- **Harry C.P. Dymond** - *Reduction of oscillations in a GaN Bridge Leg Using Active Gate Driving with sub-ns Resolution Arbitrary Gate-Impedance Pattern*
- **Faizul Momen, Khwaja Rahman, Yochan Son, Bonho Bae** and **Peter Savagian** - *Electrical Propulsion System Design of Chevrolet Bolt Battery Electric Vehicle*
- **Xu She, Rajib Datta, Maja Harfman Todorovic, Gary Mandrusiak, Jian Dai, Tony Frangieh, Philip Cioffi, Brian Rowden** and **Frank Mueller** - *High Performance SiC Power Block for Industry Applications*
- **Nicola Bianchi, Alessandro Castagnini, Giulio Secondo** and **Pietro Savio Termini** - *Replacing SPM by PMARel Machines in Low-speed Hightorque Applications*
- **Dheeraj Bobba, Gerd Bramerdorfer, Yingjie Li, Timothy A. Burress** and **Bulent Sarlioglu** - *Stator Tooth and Rotor Pole Shaping for Low Pole Flux Switching Permanent Magnet Machines to Reduce Even Order Harmonics in Flux linkage*
- **Dennis Karwatzki** and **Axel Mertens** - *Control Approach for a Class of Modular Multilevel Converter Topologies*
- **Hironori Nagasaki, Pin-Yu Huang** and **Toshihisa Shimizu** - *Characterization of Power Capacitors on Practical Current Condition Using Capacitor Loss Analyzer*
- **Amol Deshpande** and **Fang Luo** - *Comprehensive Evaluation of a Silicon-WBG Hybrid Switch*
- **Chang Peng, Landon Mackey, Iqbal Husain, Alex Huang, Bruno Lequesne** and **Roger Briggs** - *Active Damping of Ultra-fast Mechanical Switches for Hybrid AC and DC Circuit Breakers*
- **Mahshid Amirabadi** - *Cuk-Based Universal Converters in Discontinuous Conduction Mode of Operation*
- **Ashraf Said Atalla, Mohammed Agamy, Mark Dame, Liwei Hao, Gary Dwayne Mandrusiak, Konrad Weeber** and **Yan Pan** - *Advancements in High Power High Frequency Transformer Design for Resonant Converter Circuits*
Student Demonstration Winners:


**Student: Ashish Kumar, University of Colorado-Boulder.** Advisor: Khurram Afridi


**Student: Anas Al Bastami, Massachusetts Institute of Technology.** Advisor: David Perreault


**Students: Baoyun Ge, Aditya Ghule, University of Wisconsin-Madison.** Advisor: Dan Ludois
Best Paper Award – Wednesday Sessions:

- **Kent Inoue** - Reduction on Radiation Noise Level for Inductive Power Transfer Systems with Spread Spectrum focusing on Combined Impedance of Coils and Capacitors
- **Tom Cox** - Vehicular Suspension and Propulsion Using Double Sided Linear Induction Machines
- **Zitao Liao** - A GaN-based Flying-Capacitor Multilevel Boost Converter for High Step-up Conversion
- **Wooyoung Choi** - New Configuration of Multi-Functional Grid-Connected Inverter to Improve Both Current-Based and Voltage-Based Power Quality
Best Paper Award – Thursday Sessions:

- **Maksim Sokolov** - State-Space Flux-Linkage Control of Bearingless Synchronous Reluctance Motors

- **Vandana Rallabandi** - On the Feasibility of Carbon Nanotube Windings for Electrical Machines – Case Study for a Coreless Axial Flux Motor

- **Shih-Chin Yang** – High Speed Operation of Permanent Magnet Machine Position Sensorless Drive Using Discretized EMF Estimator