

- 2 Metaheuristic Optimization for Backstepping Control and Inversion Based Control from EMR for an Electric Vehicle**  
Maude Blondin, University of Florida; Clement Depature, Pierre Sicard, Université du Québec à Trois-Rivières
- 3 Fuel Efficiency Optimization Methodologies for Series Hybrid Electric Vehicles**  
Boli Chen, Simos A. Evangelou, Imperial College London; Roberto Lot, University of Southampton

- 4 Intelligent Energy Management of Vehicular Solar Idle Reduction Systems with Reinforcement Learning**  
Seyed Mohammad Hosseini, Mehrdad Mastali Majdabadi, Nasser L. Azad, John Z. Wen, Arvind Kothandaraman Raghavan, University of Waterloo

*Tuesday, 28 August 2018 14:00-15:30 Room 4k*

**RT2-1: Power Electronics, Motor Drives and Electric Power Systems I**

*Chairs: Rakesh Ramachandran & Hicham Chaoui*

- 1 Loss Minimization Using Variable DC-Link Voltage Technique for Permanent Magnet Synchronous Motor Traction System in Battery Electric Vehicle**  
Libo Liu, Ulm University; Gunther Götting, Robert Bosch GmbH; Jian Xie, Ulm University
- 2 Loss Modeling for SiC MOSFET Inverters**  
Gui-Jia Su, Oak Ridge National Lab
- 3 Silicon Carbide MOSFET Traction Inverter Operated in the Stockholm Metro System Demonstrating Customer Values**  
Martin Lindahl, KTH Bombardier Transportation; Hans-Peter Nee, KTH Royal Institute of Technology; Anders Blomberg, Bombardier Transportation; Erik Velander, KTH, Bombardier Transportation
- 4 Experimental verification of power density improvement in a GaN converter with the enhancement in layout**  
Rakesh Ramachandran, University of Southern Denmark

*Tuesday, 28 August 2018 14:00-15:30 Room 4L*

**RT5: Modeling, Analysis and Simulation of Transportation Systems**

*Chairs: Giambattista Gruosso & Shayok Mukhopadhyay*

- 1 Optimizing Fuel Consumption and Pollutant Emissions of a Spark Ignition Engine for Eco-driving Applications**  
Alice Guille des Buttes, Bruno Jeanneret, IFSTTAR; Alan Kéromnès, Université de Bourgogne; Serge Pelissier, IFSTTAR; Luis Le Moyné, DRIVE (Univ. Bourgogne Franche Comte)
- 2 Analytical Derivation of efficiency map of an Induction Machine for Electric Vehicle Applications**  
Kaibo Li, Harbin Institute of Technology

- 3 A Study on Economical Vehicle Platooning Strategy in Urban Driving Scenarios**

Yao Ma, The University of Texas at Austin; Junmin Wang, University of Texas at Austin

- 4 Influence of Battery Charging Current Limit on the Design of Range Extender Hybrid Electric Trucks**

Tong Zhao, Qadeer Ahmed, Giorgio Rizzoni, The Ohio State University

*Tuesday, 28 August 2018 14:00-15:30 Room 4M*

**RT7: Hydrogen Refueling Infrastructures and Fuel Cell Vehicles**

*Chairs: Marie Cecile Pera & Javier Solano*

- 1 Optimized Fuzzy Thermal Management of an Open Cathode Fuel Cell System**  
Mohsen Kandayeni, Alvaro Omar Macias Fernandez, Université du Québec à Trois-Rivières; Loïc Boulon, Souso Kelouwani, Université du Québec à Trois-Rivières
- 2 Ageing integration in PEMFC range extender model for on-board prognostic applications**  
Raffaele Petrone, FEMTO-st, Univ. Bourgogne Franche-Comte; Nadia Steiner, Daniel Hissel, University of Bourgogne Franche-Comté; Marie Cecile Pera, Univ. Bourgogne Franche-Comte; Nouredine Zerhouni, FEMTO-ST Institute, Univ. de Franche-Comté/CNRS/ENSMM; Samir Jemeï, University of Franche Comte; Stefan Hemmer, ElringKlinger AG; Ruud Bouwman, VDL-ETS
- 3 Sizing of fuel cell - ultracapacitors hybrid electric vehicles based on the energy management strategy**  
Javier Solano, Ricardo Dominguez, Andrés Jácome, Universidad Industrial de Santander
- 4 On The Design of a Hybrid Fuel Cell – Battery Genset for a Refrigerated Semi-Trailer Truck**  
Neigel Marx, Daniel Hissel, Elodie Pahon, University of Bourgogne Franche-Comté; Fabien Harel, IFSTTAR

*Tuesday, 28 August 2018 16:00-17:30 Room 4K*

**RT1-2: Energy Storage and Generation, Components and Systems III**

*Chairs: Ricardo de Castro & Marcello Canova*

- 1 Battery Pack Sizing Method - Case Study of an Electric Motorcycle**  
Félix-Antoine LeBel, Louis Pelletier, Pascal Messier, Université de Sherbrooke; Joao Pedro Trovao, University of Usherbrooke
- 2 Smart Balancing Control of a Hybrid Energy Storage System based on a Cell-to-Cell Shared Energy Transfer Configuration**  
Cláudio Pinto, FEUP; Ricardo de Castro, German Aerospace Center (DLR); Jorge Varela Barreras, Oxford University; Rui Esteves Araujo, University of Porto; David A. Howey, Oxford University
- 3 Using Pixel Array Method to Optimize Battery Remaining Useful Life Model**  
Jide Lu, Jean Andrian, Florida International University
- 4 Design of a High Performance Battery Pack as a Constraint Satisfaction Problem**  
Louis Pelletier, Félix-Antoine LeBel, Ruben Gonzalez-Rubio, Marc-André Roux, Université de Sherbrooke; Joao Pedro Trovao, University of Usherbrooke

*Tuesday, 28 August 2018 16:00-17:30 Room 4L*

**RT3: Vehicular Electronics and Intelligent Transportation Systems**

*Chairs: Junmin Wang & Sean Brennan*

- 1 The Security Issues of Modern In-Vehicle Networks**  
Wu Yan, Lifang Wang, Li Fang, Yanjie Guo, Institute of Electrical Engineering, Chinese Academy of Sciences
- 2 Slip Ratio Estimation for Traction Control of Electric Vehicles**  
Thanh Vo-Duy, Minh C. Ta, Hanoi University of Science and Technology
- 3 An examination of vehicle spacing to reduce aerodynamic drag in truck platoons**  
Vasudev Vohra, Mohamed Wahba, Sean Brennan, Rui Ni, Gökhan Akarlsan, Pennsylvania State University
- 4 Fuel Economy and Naturalistic Driving for Passenger Road Vehicles**  
Xingda Yan, James Fleming, Roberto Lot, University of Southampton