VIRTUAL TRACK SCHEDULE

2023001977 *Comprehensive Drive of PM Synchronous Machines Under Unpredictable Dynamics*

Rishil Kirankumar Lakhe, Electronics, Carleton University, Canada; Mohamad Alzayed, Electronics, Carleton University, Canada; Hicham Chaoui, Electronics, Carleton University, Canada and Electrical and Computer Engineering, Texas Tech University, United States

2023002261 *On the Integration of On-Route Fast Chargers for Battery Electric Buses*

Shady El-Batawy, Natural Resources Canada, CanmetENERGY Ottawa, Canada; Raed Abdullah; Hajo Ribberink, Natural Resources Canada, CanmetENERGY Ottawa, Canada

2023002101 *Online Rate-Parameter Identification of Single-Pulse-Operated Switched Reluctance Generator*

Anupam Verma, Electrical Engineering, Indian Institute of Science, India; Gopalaratnam Narayanan, Electrical Engineering, Indian Institute of Science, India

2023002104 *Prognostic and Health Management of an Aircraft Turbofan Engine Using Machine Learning*

Unnati Thakkar, Electronics, Carleton University, Canada; Hicham Chaoui, Electronics, Carleton University, Canada

2023002126 *Cycle Aging Effect on the Open Circuit Voltage of a LiFePO4 Battery*

Simone Barcellona, DEIB, Politecnico di Milano, Italy; Silvia Colnago, DEIB, Politecnico di Milano, Italy; Emanuele Fedele, DIETI, Università di Napoli Federico II, Italy; Diego Iannuzzi, DIETI, Università di Napoli Federico II, Italy; Luigi Piegari, DEIB, Politecnico di Milano, Italy; Mattia Ribera, DIETI, Università di Napoli Federico II, Italy

2023001991 *Dynamic Optimization of Fuel Cell Operating Conditions at Different Altitudes*

Jinzhou Chen, School of Mechanical Engineering, Beijing Institute of Technology, China; Hongwen He, School of Mechanical Engineering, Beijing Institute of Technology, China; Shengwei Quan, School of Mechanical Engineering, Beijing Institute of Technology, China; Zhongbao Wei, School of Mechanical Engineering, Beijing Institute of Technology, China; Zhendong Zhang, School of Mechanical Engineering, Beijing Institute of Technology, China; Jun Zhang, School of Mechanical Engineering, Beijing Institute of Technology, China

2023002034 *Operando temperature monitoring through optical fiber sensor in lithium-ion battery*

Xiuwu Wang, School of Automotive Studies, Tongji University, China

2023002268 *Virtual Temperature Sensor in Battery Thermal Management System Using LSTM-DNN*

Safieh Bamati, Department of Electronics, Carleton University, Canada; Hicham Chaoui, Department of Electronics , Carleton University, Canada; Hamid Gualous, LUSAC Laboratory, Université de Caen Normandie, France

2023002164 *An Accurate MTPA Control for IPMSM Considering Variations of Motor Parameters and Temperatures*

Thien-Phuoc Nguyen, Department of Engineering Sciences, University of Adger, Norway; Thanh-Anh Huynh, Electrical Engineering, National Cheng Kung University, Taiwan; Chin-Wei Chang, System and Naval Mechatronic Engineering, National Cheng Kung University, Taiwan; Min-Fu Hsieh, Electrical Engineering, National Cheng Kung University, Taiwan

2023002055 *Multiple fuzzy adaptive decoupled control of high-power commercial vehicular fuel cell engine*

Zhaoming Liu, School of Automotive Studies, Tongji University, China; Guofeng Chang, School of Automotive Studies, Tongji University, China; Hao Yuan, School of Automotive Studies, Tongji University, China; Wei Tang, School of Automotive Studies, Tongji University, China; Jiaping Xie, Haidriver Energy Technology, Haidriver Energy Technology, China; Xuezhe Wei, School of Automotive Studies, Tongji University, China; Haifeng Dai, School of Automotive Studies, Tongji University, China

2023002008 *Optimal Operation of Electric Vehicle Charging Stations with Variable Distributed Energy Resources in Constrained Electricity and Transportation Networks*

Mohammad Shahidehpour, ECE, Illinois Institute of Technology, United States; larissa Affolabi, laffolabi@hawk.iit.edu, ECE, Illinois Institute of Technology, United States; Farrokh Rahimi, Smart Grid, OATI, United States; Kash Nodehi, Smart Grid, OATI, United States; Sasan Mokhtari, Smart Grid, OATI, United States

10/25/2023 13:45 - 15:25	**Track 2: Power Electronics, Motor Drives and Electric Power Systems**

2023002141 *Comprehensive Experimental Study on Shaft Voltage of Traction Motor with Ceramic Bearing for Electric Vehicles*

Jun-Woo Chin, Advanced Powertrain R&D Department, Korea Automotive Technology Institute, South Korea; Deok-Jin Kim, Advanced Powertrain R&D Department, Korea Automotive Technology Institute, South Korea; Seojun Park, Advanced Powertrain R&D Department, Korea Automotive Technology Institute, South Korea; Ho-Chang Jung, Advanced Powertrain R&D Department, Korea Automotive Technology Institute, South Korea

2023002037 *Configuration Ratio of Grid-following/forming Control for High-penetration Renewable Energy Integrated System Containing Electric Vehicle*

Mengqi Zhao, School of Automation, Nanjing University of Science and Technology, China; Puyu Wang, School of Automation, Nanjing University of Science and Technology, China; Tianming Gu, School of Automation, Nanjing University of Science and Technology, China; Dejian Yang, Key Laboratory of Modern Power System Simulation and Control & Renewable Energy Technology, Northeast Electric Power University, China; Gangui Yan, Key Laboratory of Modern Power System Simulation and Control & Renewable Energy Technology, Northeast Electric Power University, China; Fang Shi , Key Laboratory of Power System Intelligent Dispatch and Control of Ministry of Education, Shandong University, China

2023002519 *Design of Hairpin Winding and Random Winding Stators for High Speed Heavy-Duty Traction Motor*

Jianan Jiang, School of Automation, Northwestern Polytechnical University, China; Tianjie Zou, Faculty of Engineering, University of Nottingham, United Kingdom; Antonino La Rocca, United Kingdom; Chuan Liu, Faculty of Engineering, University of Nottingham, United Kingdom; David Gerada, Faculty of Engineering, University of Nottingham, United Kingdom; Zeyuan Xu, Faculty of Engineering, University of Nottingham, United Kingdom; Chris Gerada, Faculty of Engineering, University of Nottingham, United Kingdom

2023002140 *Efficiency Improvement of SPMSG in the Engine-Generator System of a PHEV Shown to be Compatible with an Optimal Operating Line*

Ho-Chang Jung, Advanced Powertrain R&D Center, Korea Automotive Technology Institute, South Korea; Deokjin Kim, Advanced Powertrain R&D Center, Korea Automotive Technology Institute, South Korea; Dongsu Lee, Electrical department, Hinetics LLC, South Korea

2023001935 *Flexible Voltage Support Control of Three-phase Four-leg Inverter with Active and Reactive Power Oscillation Optimization under Typical Double-line-to-ground Faults*

Xintong Liu, School of Automation, Nanjing University of Science and Technology, China; Zhao Liu, School of Automation, Nanjing University of Science and Technology, China; Xueyi Wu, School of Automation, Nanjing University of Science and Technology, China; Kaijie Wang, School of Automation, Nanjing University of Science and Technology, China

2023001931 *Sensorless Field Oriented Control for an Induction Motor Drive using an Ideal Voltage Integration Scheme with a Dynamic Stabilising Feedback*

Kella Srinuprasad, Electrical Engineering, Indian Institute of Technology Hyderabad, India; Jose Titus, Electrical Engineering, Indian Institute of Technology Hyderabad, India

10/25/2023 16:00 - 18:00	**Track 3: Vehicular Electronics and Intelligent Transportation**

2023001972 *An Accumulative Method to Time Series Prediction for Vehicle Communication*

Vivekanandh Elangovan, Electrical and Computer Engineering, University of Michigan - Dearborn, United States; Weidong Xiang, Electrical and Computer Engineering, University of Michigan - Dearborn, United States; Sheng Liu, Electrical and Computer Engineering, University of Michigan - Dearborn, United States

2023002027   *Challenges in Protocol Standardization for Intelligent Transport Systems*

Jonas Vogt, Division of Wireless Communications and Radio Positioning (WiCoN), University of Kaiserslautern-Landau, Germany; Hans D. Schotten, Division of Wireless Communications and Radio Positioning (WiCoN), University of Kaiserslautern-Landau, Germany

2023002208   *Enhanced Fuzzy-MFC-based Traction Control System for Electric Vehicles*

Nam T. Nguyen, Department of Automation Engineering, Hanoi University of Science and Technology, Vietnam; Minh C. Ta, Department of Electrical Engineering and Computer Engineering, University of Sherbrooke, Canada; Thanh Vo-Duy, Department of Automation Engineering, Hanoi University of Science and Technology, Vietnam; Valentin Ivanov, Automotive Engineering Group, Technische Universität Ilmenau, Germany

2023002211   *Vehicle State Estimation through Modular Factor Graph-based Fusion of Multiple Sensors*

Pragyan Dahal, Department of Mechanical Engineering, Politecnico Di Milano, Italy; Jai Prakash, Department of Mechanical Engineering, Politecnico Di Milano, Italy; Stefano Arrigoni, Department of Mechanical Engineering, Politecnico Di Milano, Italy; Francesco Braghin, Department of Mechanical Engineering, Politecnico Di Milano, Italy

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10/26/2023 10:45 - 12:25   Track 4: Control and Energy Management of Transportation Systems

2023002014   *A Data-driven Energy Management Strategy for Series Hybrid Electric Tracked Vehicle based on Power Coordinated Control*

Qicong Su, National Engineering Research Center for Electric Vehicles, Beijing Institute of Technology, China; Ruchen Huang, National Engineering Research Center for Electric Vehicles, Beijing Institute of Technology, China;]|Hongwen He, National Engineering Research Center for Electric Vehicles, Beijing Institute of Technology, China; Xuefeng Han, China North Vehicle Research Institute, China North Vehicle Research Institute, China; Zegong Niu, National Engineering Research Center for Electric Vehicles, Beijing Institute of Technology, China; Zhiqiang Zhou, National Engineering Research Center for Electric Vehicles, Beijing Institute of Technology, China

2023002033   *Adaptive multi-objective optimization strategy for real-time energy management of fuel cell vehicle*

Sida Li, School of Automotive Studies, Tongji University, China; Xuezhe Wei, School of Automotive Studies, Tongji University, China; Haifeng Dai, School of Automotive Studies, Tongji University, China

2023001955   *Energy management strategy based on an improved TD3 reinforcement algorithm with novel experience replay*

Zegong Niu, School of mechanical engineering, Beijing Institute of Technology, China; Ruchen Huang, School of mechanical engineering, Beijing Institute of Technology, China; Hongwen He, School of mechanical engineering, Beijing Institute of Technology, China; Zhiqiang Zhou, School of mechanical engineering, Beijing Institute of Technology, China; Qicong Su, School of mechanical engineering, Beijing Institute of Technology, China

2023002043   *Predictive Energy Consumption Reduction for EV Adaptive CruiseControllers with Uncertain Speed Information*

Shahriar Shahram, Electrical and Computer Engineering, University of Central Florida, United States; Yaser Pourmohammadi Fallah, Electrical and Computer Engineering, University of Central Forida, United States

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10/26/2023 13:45 -15:25   Track 5: Modeling, Analysis and Simulation of Transportation

2023002030   *Guided Eco-driving of Fuel Cell Hybrid Electric Vehicles via Model Predictive Control*

Bo Liu, School of Mechanical Engineering, Beijing Institute of Technology, China; Chao Sun, School of Mechanical Engineering, Beijing Institute of Technology, China; Xiaodong Wei, School of Mechanical Engineering, Beijing Institute of Technology, China; Da Wen, School of Mechanical Engineering, Beijing Institute of Technology, China; Changjiu Ning, School of Mechanical Engineering, Beijing Institute of Technology, China;]|Haoyu Li, School of Mechanical Engineering, Beijing Institute of Technology, China

2023001958   *Seasonal effects on EV charging performance and power consumption under real traffic conditions: a case study in Umbria Region, Italy*

Elisa Belloni, Department of Engineering, University of Perugia, Italy; Vittorio Bertolini, Department of Engineering, University of Perugia, Italy; Antonio Faba, Department of Engineering, University of Perugia, Italy; Riccardo Scorretti, Department of Engineering, University of Perugia, Italy; Enrico Raschi, Department of Engineering, University of Perugia, Italy;]|Ermanno Cardelli, Department of Engineering, University of Perugia, Italy

2023001934 *Simulation of a novel approach for particulate filter heating of hybrid powertrains with model-in-loop*

Osman Yolbulan, Calibration, AVL Research & Development Turkey, Turkey; Bugra Cengiz, Calibration, AVL Research & Development Turkey, Turkey; Oytun Karaduman, Calibration, AVL Research & Development Turkey, Turkey; Kerem Tokdemir, Calibration, AVL Research & Development Turkey, Turkey; Kaan Celik, Calibration, AVL Research & Development Turkey, Turkey

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10/26/2023 16:00 - 18:00   Track 6: Charging Systems and Infrastructures

2023002137 *Optmization algorithm for the charging management of electric vehicles in multi-dwelling residential buildings.*

Salvador Carvalhosa, CPES, INESC-TEC, Portugal; José Rui Ferreira, CPES, INESC-TEC, Portugal; Rui Esteves Araújo, CPES, INESC-TEC, Portugal

2023002197 *Travel Motif-Based Learning Scheme for Electric Vehicle Charging Demand Forecasting*

Mamunur Rashid, Electrical and Computer Engineering , Tennessee Tech University, United States; Tarek Elfouly, Electrical and Computer Engineering , Tennessee Tech University, United States; Nan Chen, Electrical and Computer Engineering , Tennessee Tech University, United States

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10/27/2023 10:45 - 12:25   Track 7: Hydrogen Fueling Infrastructure and Fuel Cell Vehicles

2023002010 *Intelligent Energy Management for Fuel Cell Bus Based on Enhanced Soft Actor-Critic Algorithm*

Ruchen Huang, National Engineering Laboratory for Electric Vehicles, Beijing Institute of Technology, China; Zegong Niu, National Engineering Laboratory for Electric Vehicles, Beijing Institute of Technology, China; Qicong Su, National Engineering Laboratory for Electric Vehicles, Beijing Institute of Technology, China; Hongwen He, National Engineering Laboratory for Electric Vehicles, Beijing Institute of Technology, China; Zheng Zhou, National Engineering Laboratory for Electric Vehicles, Beijing Institute of Technology, China; Zhiqiang Zhou, National Engineering Laboratory for Electric Vehicles, Beijing Institute of Technology, China

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10/27/2023 10:45 - 12:25   Track 8: Electric Railway

2023002019 *A Multi-Criteria Analysis of High Speed Rail System in Canada*

Kshitij Saxena, Transit and Rail, KS Consulting, United States; Atul Manmohan, Transit and Rail, WSP Canada Inc , Canada

2023002004 *A Reactive Power Optimization Method for AC Metro Power Supply System Based on Particle Swarm Optimization Algorithm*

Feng Ding, School of Electrical Engineering, Southwest Jiaotong University, China; Haiqi Zhou, School of Electrical Engineering, Southwest Jiaotong University, China; Sheng Lin, School of Electrical Engineering, Southwest Jiaotong University, China

2023002048 *Energy evaluation of PV and ESS integrated AC railways for suburban trains*

Nutthaka Chinomi, Department of Electrical Engineering and Electronics, University of Liverpool, United Kingdom; Zhongbei Tian, Department of Electronic, Electrical and Systems Engineering, University of Birmingham, United Kingdom; Nakaret Kano, Department of Electrical Engineering, Khon Kaen University, Thailand; Lin Jiang, Department of Electrical Engineering and Electronics, University of Liverpool, United Kingdom

2023002018 *Ensuring Customer Satisfaction on long distance train journeys: An Indian Railways Case Study*

Kshitij Saxena, Transit and Rail, KS Consulting, United States

2023002063 *Research on Model Predictive Control Method of Heavy-Haul Trains Based on Multi-Point Model*

Yong Liu, CRRC Times Electric, CRRC Zhuzhou Electric Locomotive Research Institute, China; Jie Yi, CRRC Times Electric, CRRC Zhuzhou Electric Locomotive Research Institute, China; Zhengfang Zhang, CRRC Times Electric, CRRC Zhuzhou Electric Locomotive Research Institute, China; Fan Jiang, CRRC Times Electric, CRRC Zhuzhou Electric Locomotive Research Institute, China; Jinglei Bai, CRRC Times Electric, CRRC Zhuzhou Electric Locomotive Research Institute, China; Yuan Luo, CRRC Times Electric, CRRC Zhuzhou Electric Locomotive Research Institute, China