

EVER2019 Final Program

Wednesday May 8, 2019

14H00 - 16H30: Registration

Opening

16H30 - 17H00, Room Auric 2-3

Chairs: Raoul Viora, President of Monaco Sustainable Development Association (Monaco)

**Ahmed Masmoudi, Chairman of the Program and Publication Committees and
Head of the Laboratory on Renewable Energies and Electric Vehicles (Tunisia)**

First Plenary Session

17H00 - 18H00, Room Auric 2-3

Chairs: Elena A. Lomonova (The Netherlands) and Michael Schier (Germany)

EVER19-PS1 *Overview of Hybrid Excited PM Machines for Electric Vehicles*

Zi Qiang Zhu
University of Sheffield, UK

18H00: Welcome Reception Hosted by the Government of Monaco



Thursday May 9, 2019

Second Plenary Session

9H00 - 10H00, Room Auric 2-3

Chairs: Ilhem Slama-Belkhdja (Tunisia) and Rosario Miceli (Italy)

EVER19-PS2 *Power Electronics - the Key Technology for Renewable Energy System Integration*

Frede Blaabjerg

Aalborg University, Denmark

10H00 - 10H30: Coffee Break

RE1: Lecture Session on Grid Integration of Renewables

10H30 - 12H30, Room Auric 2-3

Chairs: Frede Blaabjerg (Denmark) and Alberto Doria (Italy)

EVER19-02 *Power Grid Simulation Considering Electric Vehicles and Renewable Energy Sources*

Avilash Cramer, Ian Miller, Neal Eichenberg, Juan De Jesus, and Luca Daniel
Massachusetts Institute of Technology, USA

Michela Longo

Politecnico di Milano, Italy

EVER19-06 *Analysis of Optimization Strategies for Grid-Side Converter Control during Grid Faults Using DSRF Control*

Katharina Gunther, Florian Bendrat, and Constantinos Sourkounis
Ruhr University Bochum, Germany

EVER19-35 *Wave Loading and Wind Energy of a Spar Buoy Floating Wind Turbine*

Thomas P. Mazarakos

National Technical University of Athens, Greece

Spyridon A. Mavrakos and Takvor H. Soukisian

Hellenic Centre for Marine Research, Greece

EVER19-37 *Control of a Double Fed Induction Generator Based Wind Energy Conversion System Equipped with a Modular Multilevel Matrix Converter*

Carlos Melendez, Matias Diaz, Felix Rojas, and Roberto Cardenas
University of Santiago, Chile

Mauricio Espinoza

University of Costa Rica, Costa Rica

EVER19-44 *Energy and Economic Performance of the FARWIND Energy System for Sustainable Fuel Production from the Far-Offshore Wind Energy Resource*

Aurélien Babarit, Jean-Christophe Gilloteaux, Edwin Body, and Jean-François Hetet
Centrale Nantes, France

EVER19-81 *Optimal Energy Management of Wind Hybrid System Considering Planned Load and Wind Generation Reduction*

Sondes Skander-Mustapha and Ilhem Slama-Belkhodja
Université de Tunis El Manar, Tunisia

EV1: Lecture Session on the Design, Modeling, and Analysis of Electric Machines Intended to Sustainable Applications (Part 1)

10H30 - 12H30, Room Apollinaire

Chairs: Armin Dietz (Germany) and Antonino Oscar Di Tommaso (Italy)

EVER19-03 *Demagnetisation Current Due to Short Circuit Effect on an Inset Permanent Magnet Motor*

Mikael Alatalo and Torbjörn Thiringer
Chalmers University of Technology, Sweden

EVER19-53 *Drive Cycles Study of Electrical Machine with Recycled Rare Earth Permanent Magnets on Mild Hybrid Electrical Vehicle Platform*

Ziwei Li, Haitham Lahiani, Maxime Reynouard, and Jean-Marc Dubus
Valeo, France

EVER19-56 *Per Unit Approach Based Assessment of Torque Production Capability of PMSMs Operating in the Field Weakening Region*

Michal Gierczynski and Lech Grzesiak
Warsaw University of Technology, Poland

EVER19-99 *Reduction of Open-Circuit DC Winding Induced Voltage in Hybrid-Excited Switched-Flux Permanent Magnet Machine*

X.Y. Sun and Z.Q. Zhu
University of Sheffield, UK

EVER19-100 *Analysis of Open-Circuit DC Winding Induced Voltage in Partitioned-Stator Hybrid-Excited Switched-Flux Machine*

X.Y. Sun and Z.Q. Zhu
University of Sheffield, UK

EVER19-122 *Torque Optimization of Synchronous Reluctance Motor for Electric Powertrain Application*

Qibin Chen and Yang Tang
e-Traction, The Netherlands

Elena A. Lomonova
Eindhoven University of Technology, The Netherlands

EV2: Lecture Session on the Design and Operation Analysis of Electric and Hybrid Vehicles (Part 1)

10H30 - 12H30, Room Auric 1

Chairs: Fabrizio Marignetti (Italy) and Markus Lienkamp (Germany)

EVER19-08 *Electrification of Agricultural Machinery: a Feasibility Evaluation*

Diego Troncon, Luigi Alberti, and Silverio Bolognani
University of Padua, Italy
Federica Bettella and Alberto Gatto
Carraro Spa, Italy

EVER19-24 *Analysis of Optimal Charging Points Location and Storage Capacity for Hybrid and Full Electric Buses*

Josu Olmos, Jon Ander Lopez, and Haizea Gaztanaga
IK4-IKERLAN Technology Research Centre, Spain
Victor Isaac Herrera
Escuela Superior Politécnica de Chimborazo, Ecuador

EVER19-27 *Reliability Evaluation of non-Repairable Propulsion Systems of Hybrid-Electric Helicopter with Different Level of Hybridization*

Igor Bolvashenkov, Jörg Kammermann, and Hans-Georg Herzog
Technical University of Munich, Germany
Wenbin Zeng
Jilin University, China

EVER19-103 *Efficiency Comparison between Series Hybrid Bike and Traditional Bike*

Edgar Tournon and Bertrand Barbedette
ESTACA'LAB, France
Pascal Venet and Ali Sari
Ecole Centrale de Lyon, France
Adrien Lelievre
STEE, France
Judicaël Aubry
University of Rennes 1, France

EVER19-98 *An ECMS-based Approach for Energy Management of a HEV Equipped with an Electrical Variable Transmission*

Majid Vafaeipour, Mohamed El Baghdadi, Joeri Van Mierlo, and Omar Hegazy
Vrije Universiteit Brussel, Belgium
Florian Verbelen and Peter Sergeant
Ghent University, Belgium

EVER19-105 *Zero Emission Super-Yacht*

Edward Eastlack

Braemar Technical Services Inc., USA

Sven Klingenberg

Skysails Yacht GmbH, Germany

Anders Lidqvist and Par Olsson

MAN Energy Solutions, Sweden

Egon Faiss

NED SHIP GROUP, Switzerland

Michael Witt

MAN Energy Solutions, Denmark

Richard Sauter

Sauter Carbon Offset Design, Indonesia

Steve Szymanski

Nel Hydrogen, USA

12H30 - 14H00: Lunch

**RE2: Lecture Session on the Integration of Power Electronic Converters
in Renewable Energy Systems**

14H00 - 16H00, Room Auric 2-3

Chairs: Ilhem Belkodja-Slama (Tunisia) and Aurélien Babarit (France)

EVER19-14 *Multi-Source Power System Based on PV-Batteries and Diesel Generator for Micro-Grid Applications*

M.M.G. Lawan, M.B. Camara, J. Raharijaona, and B. Dakyo

University of Le Havre, France

EVER19-30 *A Fast-Transient Current Control Strategy for Three-Phase Four-Wire Modular Multilevel Inverter in Grid-tied Battery Energy Storage System*

Taha Lahlou, Shyam Ramakrishnan, Markus Herzog, Igor Bolvashenkov, and Hans-Georg Herzog

Technical University of Munich, Germany

EVER19-34 *Performance Evaluation of Model Predictive Control for Neutral-Point-Clamped Voltage Source Converter with LCL Filter*

Johnny Chhor, Felix Woltjen, and Constantinos Sourkounis

Ruhr University Bochum, Germany

EVER19-40 *Control of Three-Phase Power Electronic Converter with Power Controllers in Stationary Frame*

Sebastian Wodyk and Grzegorz Iwanski

Warsaw University of Technology, Poland

EVER19-104 *Control and Design of an IPOS DC-DC Converter Applied to High Voltage DC Transmission in a Wave Energy Converter*

J.S. Artal-Sevil, J.A. Domínguez-Navarro, D. Martínez, and C. Bernal-Ruíz

University of Zaragoza, Spain

EVER19-115 *Control strategy for Modular Multilevel Converter Applied to Active Power Injection and Reactive Power Compensation: Integration in PV Microgrids*

J.S. Artal-Sevil, J.A. Domínguez-Navarro, and I. Sanz-Gorrachategui
University of Zaragoza, Spain

A. Coronado-Mendoza
University of Guadalajara, Mexico

EV3: Lecture Session on Multi-Physics Modeling and Characterization of BEV Powertrain Components

14H00 - 16H00, Room Apollinaire

Chairs: Elena A. Lomonova (The Netherlands) and Zi Qiang Zhu (UK)

EVER19-07 *A Time-efficient Test Rig for Thermal Characterisation of Electric Machines and Manufacturing Process Development*

Yufeng Guo, Juliette Soulard, and David Greenwood
University of Warwick, UK

EVER19-18 *Multi-fidelity Electro-thermal Optimization of Multiport Converter employing SiC MOSFET and Indirect Liquid Cooling*

Dai-Duong Tran, Sajib Chakraborty, Arthur Van Melckebeke, Ngoc-Tan Vu, Mohamed El Baghdadi, and Omar Hegazy
Vrije Universiteit Brussel, Belgium

EVER19-25 *Calculation of Thermal Transient Behavior of a 9-Phase Permanent Magnet Synchronous Motor for Flight Traction Applications*

Igor Bolvashenkov, Jörg Kammermann, Kostiantyn Udovichenko, Laurenz Tippe, and Hans-Georg Herzog
Technical University of Munich, Germany

EVER19-80 *Heat Transfer Coefficients in a Coupled 3-D Model of a Liquid-Cooled IPM Traction Motor Compared with Measurements*

Sonja Tidblad Lundmark, Emma Arfa Grunditz, and Torbjörn Thiringer
Chalmers University of Technology, Sweden

Andreas Andreasson, Anders Bergqvist, Raik Orbay, and Erik Jansson
Volvo Cars Corporation, Sweden

EVER19-91 *Finite Element versus Experimental Thermo-Mechanical Behaviour of Prismatic Li-Ion Cell*

Francesco Mocera, Elena Vergori, and Aurelio Somà
Politecnico di Torino, Italy

EVER19-116 *Design of a Six-Phase Fault-Tolerant Electric Motor for an Aircraft Fuel Pump*

Flyur R. Ismagilov, Viacheslav Ye. Vavilov, Ruslan D. Karimov, and Valentina V. Ayguzina
Ufa State Aviation Technical University, Russia

Jörg Kammermann, Igor Bolvashenkov, and Hans-Georg Herzog
Technical University of Munich, Germany

EV4: Lecture Session on Batteries (Part 1)

14H00 - 16H00, Room Auric 1

Chairs: Jostein Bogen (Norway) and Par Olsson (Sweden)

EVER19-09 *Accelerated Aging Characterization of Lithium-Ion Cells: Limitation of Arrhenius Dependency*

Tanja Gewalt, Dirk Lehmkuhl, Alexander Hahn, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-17 *Investigating Stationary Storage Applications and their Impact on Battery Aging*

Jakob Kraenzl and Tam T. Nguyen
BMW Group, Germany
Andreas Jossen
Technical University of Munich, Germany

EVER19-20 *Bus-to-Route and Route-to-Bus Approaches in Hybrid Electric Buses Fleet for Battery Lifetime Extension*

Jon Ander Lopez-Ibarra, Aitor Milo, and Haizea Gaztanaga
IK4-IKERLAN Technology Research Centre, Spain
Victor Isaac Herrera
Escuela Superior Politécnica de Chimborazo, Ecuador
Haritza Camblong
University of the Basque Country, Spain
ESTIA Research, France

EVER19-21 *Battery Aging Conscious Intelligent Energy Management Strategy for Hybrid Electric Buses*

Jon Ander Lopez-Ibarra, Mattin Lucu, Nerea Goitia, and Haizea Gaztanaga
IK4-IKERLAN Technology Research Centre, Spain
Victor Isaac Herrera
Escuela Superior Politécnica de Chimborazo, Ecuador
Haritza Camblong
University of the Basque Country, Spain
ESTIA Research, France

EVER19-82 *Incremental Capacity Analysis for Electric Vehicle Battery State-of-Health Estimation*

Erik Schaltz and Daniel-loan Stroe
Aalborg University, Denmark
Kjeld Nørregaard and Lasse Stenhøj Kofod
Danish Technological Institute, Denmark
Andreas Christensen
LiTHIUM BALANCE A/S, Denmark

EVER19-86 *Calendar Aging Lifetime Model for NMC-based Lithium-Ion Batteries Based on EIS Measurements*

Alejandro Gissero, Daniel-loan Stroe, and Erik Schaltz
Aalborg University, Denmark

16H30 - 16H30: Coffee Break

RE3: Lecture Session on Renewable Energies Harvesting, Storage, and Grid Integration

16H30 - 18H30, Room Auric 2-3

Chairs: Michela Longo (Italy) and Thomas Hackman (Finland)

EVER19-33 *Operation and Control Strategies for Wind Energy Conversion Systems: Review and Simulation Study*

Johnny Chhor, Andre Matschke, Vile Kipke, and Constantinos Sourkounis
Ruhr University Bochum, Germany

EVER19-47 *Concept for a Scalable Cybernetic Energy Management System and its Environmental Coupling for a Battery Storage System*

Andreas W. Ebentheuer, Markus Herzog, and Hans-Georg Herzog
Technical University of Munich, Germany

EVER19-73 *Modelling and Optimal Sizing of Photovoltaic Water Pumping Systems – Sensitivity Analysis*

Simon Meunier, Loïc Quéval, Arouna Darga, Philippe Dessante, and Claude Marchand
Sorbonne University, France

Matthias Heinrich
DargaTech SARL, Burkina Faso

Judith A. Cherni and Elvire A. de la Fresnaye
Imperial College London, UK

Lionel Vido
University of Cergy-Pontoise, France

Bernard Multon
University of Rennes, France

Peter K. Kitanidis
Stanford University, USA

EVER19-55 *Response of a Piezoelectric Harvester to Impacts Generated by Rain-Drops*

Alberto Doria, Giulio Fanti, and Federico Moro
Università degli Studi di Padova, Italy

EVER19-106 *A Novel and Simple PV Generator Test Procedure for EN50530 Standard Static MPPT Efficiency*

Manelle Hasnaoui and Ilhem Slama-Belkhodja
Université de Tunis El Manar, Tunisia

Afef Bennani-Ben Abdelghani and Houda Ben Attia Sethom
Université de Carthage, Tunisia

EVER19-108 *Aquavoltaic System for Harvesting Salt and Electricity at the Salt Farm Floor*

Bongsuk Kim and Seungmin Lee
Korea Electric Power Research Institute, Republic of Korea

Gunho Kim, Jongsung Park, and Cheolhyun Lim
Green Energy Institute, Republic of Korea

EV5: Lecture Session on the Design, Modeling, and Analysis of Electric Machines Intended to Sustainable Applications (Part 2)

16H30 - 18H30, Room Apollinaire

Chairs: Zi Qiang Zhu (UK) and Ian Mc Bride (Germany)

EVER19-28 *Fault Tolerance Assessment of Multi-Motor Electrical Drives with Multi-Phase Traction Motors Based on LZ-Transform*

Igor Bolvashenkov, Jörg Kammermann, and Hans-Georg Herzog
Technical University of Munich, Germany

Ilia Frenkel
Shamoon College of Engineering, Israel

EVER19-29 *Operational Availability and Performance Analysis of the Multi-Drive Multi-Motor Electric Propulsion System of an Icebreaker Gas Tanker for Arctic*

Igor Bolvashenkov, Jörg Kammermann, and Hans-Georg Herzog
Technical University of Munich, Germany

Ilia Frenkel
Shamoon College of Engineering, Israel

EVER19-43 *Advanced Control Method for Traction Electric Drives with Multiphase Induction Motors: Design and Potential*

Andrey V. Brazhnikov and Dalerdzhon A. Sharipov
Siberian Federal University, Russia

Igor Bolvashenkov, Jörg Kammermann, and Hans-Georg Herzog
Technical University of Munich, Germany

EVER19-109 *Electric Machine Design Tool for Permanent Magnet Synchronous Machines*

Svenja Kalt, Jonathan Erhard, Benedikt Danquah, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-117 *Feasibility Study of Multi-Phase Machine Winding Reconfiguration for Fully Electric Vehicles*

B. Daniels, J. Gurung, H. Huisman, and E. A. Lomonova
Eindhoven University of Technology, The Netherlands

EVER19-120 *Differential Leakage Factor in Electrical Machines Equipped with Asymmetrical Multiphase Windings: a General Investigation*

M. Caruso, A. O. Di Tommaso, L. Giangrasso and R. Miceli
University of Palermo, Italy

F. Marignetti
University of Cassino and South Lazio, Italy

R. Rizzo
University of Naples Federico II, Italy

EV6: Lecture Session on Batteries (Part 2)

16H30 - 18H30, Room Auric 1

Chairs: Pascal Venet (France) and Edward Schwarz (USA)

EVER19-15 *A Holistic Approach for Simulation and Evaluation of Electrical and Thermal Loads in Lithium-Ion Battery Systems*

Christoph Reiter, Leo Wildfeuer, Nikolaos Wassiliadis, Thilo Krahl, Johannes Dirnecker, and Markus Lienkamp

Technical University of Munich, Germany

EVER19-31 *Experimental Characterization of Li-Ion Battery Resistance at the Cell, Module and Pack Level*

Leo Wildfeuer, Nikolaos Wassiliadis, Christoph Reiter, Michael Baumann, and Markus Lienkamp

Technical University of Munich, Germany

TWAICE Technologies GmbH, Germany

EVER19-32 *Design of Thermal Management Systems for Battery Electric Vehicles*

Christoph Reiter, Nikolaos Wassiliadis, and Markus Lienkamp

Technical University of Munich, Germany

EVER19-50 *State of Charge Balancing during Fault Tolerant Operation of Battery Storage Systems Based on Cascaded H-Bridge Multilevel Inverter*

Markus Herzog, Andreas W. Ebentheuer, and Hans-Georg Herzog

Technical University of Munich, Germany

EVER19-65 *Working Towards Greener Golf Carts – A Study on the Second Life of Lead-Acid Batteries*

Jérémy Dulout

SOVECTRON SAS, France

Luiz Fernando Lavado Villa

University of Toulouse, France

EVER19-83 *Partial Charging Method for Lithium-Ion Battery State-of-Health Estimation*

Erik Schaltz and Daniel-Ioan Stroe

Aalborg University, Denmark

Kjeld Nørregaard and Bjarne Johnsen

Danish Technological Institute, Denmark

Andreas Christensen

LiTHIUM BALANCE A/S, Denmark

20H30: Conference Official Dinner (Novotel Monte Carlo Hotel)



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Friday May 10, 2019

Third Plenary Session

9H00 - 10H00, Room Auric 2-3

Chairs: Constantinos Sourkounis (Germany) and Antonino Oscar Di Tommaso (Italy)

EVER18-PS3 *Advances in the Study of Current Source Inverters*

Fabrizio Marignetti

University of Cassino and South Lazio, Italy

10H00 - 10H30: Coffee Break

**RE4: Lecture Session on Microgrids and Grid Integration of EVs with
Emphasis on Wireless Charging Infrastructures**

10H30 - 12H30, Room Auric 2-3

Chairs: Fabrizio Marignetti (Italy) and Erik Schaltz (Denmark)

EVER19-64 *Control Signaling in Wireless Power Transfer for Electric Vehicles through Ultra-Wideband*

Myrel Alsayegh, Benedikt Schmuelling, and Markus Clemens

University of Wuppertal, Germany

EVER19-77 *Operational, Economic and Environmental Benefits of Smart Inverter Volt/VAr Functions in a PV Saturated Distribution System*

Mingyue Wei, Aristides Kiprakis, and Rentao Wu

University of Edinburgh, UK

EVER19-84 *An Optimized Charging Infrastructure for Wireless Power Transfer Systems from an Economic View*

Amelie Burkert, Kevin Lambertz, and Benedikt Schmuelling

University of Wuppertal, Germany

Sebastian Jeschke and Joerg Baerenfaenger

EMC Test NRW GmbH, Germany

EVER19-88 *Evaluation of Stray Fields for Inductive Power Transfer in Electric Vehicle Charging Applications*

Daniel Pehrman and Yujing Liu

Chalmers University of Technology, Sweden

EVER19-101 *Economic Dispatch of Microgrid Based on Multi-Agent System*

Xiaosheng Wang and Lingbo Li

Huazhong University of Science & Technology, China

Juan M. Lujano-Rojas, J. S. Artal-Sevil, José M. Yusta, and José A. Domínguez-Navarro

University of Zaragoza, Spain

EVER19-106 *Investigation in the Modeling Complexity of Parallel and Grid-Connected Inverters from Similar to Different LCL Filters Parameters*

Manef Bourogaoui and Azeddine Houari
Université de Tunis El Manar, Tunisia

Houda Ben Attia Sethom
Université de Carthage Tunis, Tunisia

Mohamed Machmoum
Université de Nantes, France

EV7: Lecture Session on the Design and Operation Analysis of Electric and Hybrid Vehicles (Part 2)

10H30 - 12H30, Room Auric 1

Chairs: Igor Bolvashenkov (Germany) and Armin Dietz (Germany)

EVER19-11 *Route Specific Driver Characterization for Data-Based Range Prediction of Battery Electric Vehicles*

Christoph Simonis and Roman Sennefelder
IAV GmbH, Germany

EVER19-58 *Effect of System Parameters on Load Levelling Strategy for a Plugin Parallel Hybrid Two-Wheeler*

K. N. Kavitha, Andrew McGordon, Antony Allen, and D. Q. Truong
Warwick University, UK

EVER19-63 *Comparison of drive train topologies for electric vehicles with regard to regenerative braking*

Philipp Spichartz and Constantinos Sourkounis
Ruhr University Bochum, Germany

EVER19-69 *A Longitudinal Simulation Model for a Fuel Cell Hybrid Vehicle: Experimental Parameterization and Validation with a Production Car*

Werner Schmid, Leo Wildfeuer, Julian Kreibich, Robin Büechl, Marius Schuller, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-71 *Application-Based Design of Electric Machines for New Vehicle Concepts in Developing Countries*

Svenja Kalt, Matthias Brönner, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-75 *Connected-Autonomous Electric Vehicles based on DC-Bus Stabilisation Using Hybrid Storage System*

T. C. Lin, S. A. Amamra, and J. Marco
Warwick Manufacturing Group, UK

12H30 - 14H00: Lunch

REV: Poster Session on Technologies and Approaches Involved in Ecological Vehicles and Renewable Energies

14H00 - 15H30, Conference Center Hall

Chairs: Michael Schier (Germany) and Fabio Viola (Italy)

EVER19-01 *Influence of Medium Temperature on the Efficiency of Wet Rotor Pumps*

Evangelos Kravaritis and Constantinos Sourkounis
Ruhr University of Bochum, Germany

EVER19-05 *Empiric Weight Model for the Early Phase of Vehicle Architecture Design*

Matthias Felgenhauer, Lorenzo Nicoletti, Ferdinand Schockenhoff, Christian Angerer, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-16 *Modular, Open Source Simulation Approach: Application to Design and Analyze Electric Vehicles*

Benedikt Danquah, Alexander Koch, Tony Weiß, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-19 *Agent-based Simulation of a Car-sharing System with Hydrogen-powered Vehicles*

Manfred Klöppel, Werner Schmid, and Markus Lienkamp
Technical University Munich, Germany

EVER19-41 *Modified Voltage Oriented Control of Brushless Doubly Fed Induction Generator Based Drivetrain under Grid Imbalance Conditions*

Gennadiy Dauksha and Grzegorz Iwanski
Warsaw University of Technology, Poland

EVER19-42 *Techno-Economical Implementation of Holistic Electromobility Solutions in Commercial Companies*

Adam Waclaw, Johannes Betz, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-57 *How to Share What We Used to Own*

Artur Grisanti Mausbach, Daniel Quinlan, and Samuel Johnson
Royal College of Art, UK
Luke Harmer
Loughborough University, UK

EVER19-59 *Investigation of the Influence of Direct and Indirect Current Control Methods on the Dynamic Properties of a State Space Speed Control*

Philip Krajinski, Florian Bendrat, and Constantinos Sourkounis
Ruhr University Bochum, Germany

EVER19-62 *Concept of Interlinking Mobility Services for Urban Transport towards Intermodal Mobility Including Private and Shared Electromobility*

Daniel Breuer, Philipp Spichartz, and Constantinos Sourkounis
Ruhr University Bochum, Germany

EVER19-74 *A Quasi-Steady-State Lap Time Simulation for Electrified Race Cars*

Alexander Heilmeier, Maximilian Geisslinger, and Johannes Betz
Technical University of Munich, Germany

EVER19-121 *Forecasting the Diffusion of Hydrogen EV Refuelling Infrastructures in Italy*

F. Viola, G. Ala, N. Campagna, V. Castiglia, G. Schettino, D. Zaninelli, and R. Miceli
University of Palermo, Italy

15H30 - 16H00: Coffee Break

EV8: Lecture Session on Automotive Thermal Management and Air-Conditioning and Auxiliary Systems

16H00 - 18H00, Auric 1

Chairs: Sonja Tidblad Lundmark (Sweden) and Jeremy Dulout (France)

EVER19-60 *Efficient Simulation of Thermal Management Systems for BEV*

Christoph Reiter, Johannes Dirnecker, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-13 *Optimization of a Thermal Management System for Battery Electric Vehicles*

Manuel Scholl, Katharina Minnerup, Christoph Reiter, Benno Bernhardt, Elena Weisbrodt, and Sebastian Newiger
Technical University of Munich, Germany

EVER19-51 *Investigation of a Multi Stage Vapour-Injection Cycle to Improve Air-Conditioning System Performance of Electric Buses*

Aditya Pathak, Matthias Binder, Aybike Ongel
TUMCREATE LTD, Singapore
Heong Wah Ng
Nanyang Technological University, Singapore

EVER19-72 *An Evaluation of Autoencoder and Sparse Filter as Automated Feature Extraction Process for Automotive Damper Defect Diagnosis*

Thomas Zehelein, Philip Werk, and Markus Lienkamp
Technical University of Munich, Germany

EVER19-118 *Thermo-management and Cabin Climatization in Electric Vehicles Using a Hydrogen Based A/C-Unit*

R. Hegner, H. Dittus, M. Schier, H. E. Friedrich, C. Weckerle, and I. Bürger
German Aerospace Center, Germany

EVER19-123 *Fault-Tolerant Controller and Failure Analysis of Automotive Electromagnetic Suspension Systems*

D. V. Retianza, J. v. Duivenbode, H. Huisman, and E. A. Lomonova
Eindhoven University of Technology, The Netherlands

EV9: Lecture Session on the Design, Modeling, and Analysis of Electric Machines Intended to Sustainable Applications (Part 3)

16H00 - 18H00, Auric 2-3

Chairs: Zi Qiang Zhu (UK) and Houda Ben Attia Sethom (Tunisia)

EVER19-45 *Holistic Analysis of Potential Stator Designs using Parameter Permutation*

Svenja Kalt, Jonathan Erhard, and Markus Lienkamp
University of Munich Munich, Germany

EVER19-94 *Dummy Slots Effect on the Torque Ripple and Electromagnetic Forces for Small Permanent Magnet Brushed DC Motors*

Mohamed Ali Ben hamed, Thierry Tollance, Michel Hecquet, Frederic Gillon, and Abdelmounaim Tounzi
Ecole Centrale de Lille, France

EVER19-113 *Geometric Optimization of Variable Flux Reluctance Machines for Full Electric Vehicles*

M.M.J. Zuurbier, C.A. Fahdzyana, T. Hofman, J. Bao, and E.A. Lomonova
Eindhoven University of Technology, The Netherlands

EVER19-119 *Experimental Comparison of Efficiency Enhancement Algorithms for Three-Phase Induction Motors*

A. Bruno, M. Caruso, A. O. Di Tommaso, C. Nevoloso, and R. Miceli
University of Palermo Italy

EVER19-124 *Analytical Based Enhancement of the Torque Production Capability of Flux Switching PM Machines*

Anis Abdelkefi and Imen Abdennadher
University of Sfax, Tunisia

EVER19-125 *Comparison of the No-Load Features of IPM and Consequent Pole Tubular-Linear PM Synchronous Machines*

Amal Souissi, Imen Abdennadher, and Ahmed Masmoudi
University of Sfax, Tunisia

See you in EVER2020

