

EVER2018 Final Program

Tuesday April 10, 2018

14H00-16H30: Registration

Opening and First Plenary Session

16H30 - 18H00, Room Bosio

Chairs: Raoul Viora (Monaco), Ahmed Masmoudi (Tunisia), and Grzegorz Ombach (Germany)

EVER18-PS1 *Mechatronic Actuators for Automotive Applications*

Michael Schier

German Aerospace Center, Germany

18H00: Welcome Reception Hosted by the Government of Monaco



Wednesday April 11, 2018

Second Plenary Session

9H00 - 10H00, Room Bosio

Chairs: Eleonora Guseinoviene (Lituania), Rosario Micheli (Italy), and Guoli Li (China)

EVER18-PS2 *The Role of Ocean Renewables in Offshore Grid Development*

Elisabetta Tedeschi

Norwegian University of Science and Technology, Norway

10H00 - 10H30: Coffee Break

RE1: Special Session on Conversion Units for Future Flexible DC Grids

10H30 - 12H30, Room Bosio

Chairs: Amin Bahmani (Sweden) and Alireza Nami (Sweden)

EVER18-105 *Transformerless DC/DC Converter based on the Autotransformer Concept for the Interconnection of HVDC Grids*

Joan Sau-Bassols, Eduardo Prieto-Araujo, and Oriol Gomis-Bellmunt
CITCEA-UPC, Spain

Roberto Alves Baraciarte and Alireza Nami
ABB Corporate Research Centre, Sweden

EVER18-106 *Integration of Offshore Wind Energy into an Island Grid by Means of a Multi-Terminal VSC-HVDC Network*

Marta Haro-Larrode and Maider Santos-Mugica
Tecnalia Research and Innovation, Spain

Agurtzane Etxegarai and Pablo Eguia
The University of the Basque Country, Spain

EVER18-107 *Efficiency Investigation of 2L-DAB and ML-DAB for High-Power PV Applications*

Babak Alikhanzadeh, Amin Bahmani, and Torbjörn Thiringer
Chalmers University of Technology, Sweden

EVER18-108 *Core Loss Evaluation of High-Frequency Transformers in High-Power DC-DC Converters*

Amin Bahmani
Chalmers University of Technology

EVER18-109 *Impact of DC Side Fault Protection on Performance and Operation of Multi-Terminal DC (MTDC) Systems*

M. Mobarrez, S. Acharya, and S. Bhattacharya
North Carolina State University, USA

EVER18-110 *An Approach for Small Scale Power Hardware in the Loop Emulation of HVDC Cables*

Santiago Sanchez and Elisabetta Tedeschi
Norwegian University of Science and Technology, Norway
Salvatore D'Arco and Andrzej Holdyk
SINTEF Energy Research, Norway

EV1: Lecture Session on Electric and Hybrid Vehicles

10H30 - 12H30, Room Scotta

Chairs: Fabrizio Marignetti (Italy) and Benedikt Schmuelling (Germany)

EVER18-20 *Fuel Economy Potential for a Power Split Type Hybrid System with 4-speed Transmission by Adding Parallel Mode*

Yoonuk Kim, Hanho Son, Sungwook Choi, Jaewon Jung, Jeongseok Yun, and Hyunsoo Kim
Sungkyunkwan University, Korea

EVER18-21 *Energy Consumption of Parallel type Hybrid Electric Vehicle with Continuously Variable Transmission using Electric Oil Pump*

Junbeom Wi, Hyunhwa Kim, Jiho Yoo, Hanho Son, and Hyunsoo Kim
Sungkyunkwan University, Korea
Byungjae Kim
Hyundai Powertech, Korea

EVER18-22 *Influence of Number of Gear Step on Engine and Motor Operation Characteristics for Parallel HEV*

Hyunhwa Kim, Junbeom Wi, Jiho Yoo, Hanho Son, and Hyunsoo Kim
Sungkyunkwan University, Korea
Chiman Park
Hyundai Powertech, Korea

EVER18-31 *Using Markov Reward Model for Decision Making in the Choice of Optimal Type of Traction Electric Motor for Icebreaking Ship*

Igor Bolvashenkov and Hans-Georg Herzog
Technical University of Munich, Germany
Ilia Frenkel and Lev Khvatskin
Shamoon College of Engineering, Israel

EVER18-49 *Experimental Comparison of Energy Management Strategies for a Hybrid Electric Bus in a Test-Bench*

Andres Sierra, Victor Herrera, Amaia Gonzalez, Aitor Milo, and Haizea Gaztañaga
IK4-IKERLAN Technology Research Centre, Spain
Haritza Camblong
University of the Basque Country, Spain

EVER18-54 *Holistic Design of an Electric Vehicle with Range Extender in Connected Traffic Systems*

Soeren Scherler and Xiaobo Liu-Henke
Ostfalia University of Applied Sciences, Germany

EV2: Lecture Session on the Design, Modeling, and Analysis of Electric Machines Dedicated to Sustainable Applications

10H30 - 12H30, Room Poulenc 1

Chairs: Elena Lomonova (The Netherlands) and Grzegorz Ombach (Germany)

EVER18-02 *Comparative Analysis of Variable Flux Reluctance Machines with Double- and Single-layer Concentrated Armature Windings*

L. R. Huang and Z. Q. Zhu
University of Sheffield, UK

J.H. Feng, S.Y. Guo, and J.X. Shi
CRRC Zhuzhou Institute Co. Ltd, China

EVER18-46 *Three Traction Motors with Different Magnet Materials - Influence on Losses, Vehicle Performance, Energy Use and Environmental Impact*

Emma Arfa Grunditz, Sonja Tidblad Lundmark, Mikael Alatalo, Torbjörn Thiringer, and Anders Nordelöf
Chalmers University of Technology, Sweden

EVER18-52 *MEC-Based Prediction of the Air Gap Flux Density Distribution of Spoke-Type IPM Machines*

Nada Elloumi and Ahmed Masmoudi
University of Sfax, Tunisia

Mauro Bortolozzi and Alberto Tassarolo
University of Trieste

EVER18-53 *FEA-Assisted Resolution of the Steady-State Model for a Spoke Type IPM Machine with Enhanced Flux Weakening Capability*

Nada Elloumi and Ahmed Masmoudi
University of Sfax, Tunisia

Mauro Bortolozzi and Alberto Tassarolo
University of Trieste

EVER18-101 *Analytical Model-Based Optimization of the Force Production Capability of IPM T-LSMs*

Rihab Bel Haj Slimen, Imen Abdennadher, and Ahmed Masmoudi
University of Sfax, Tunisia

EVER18-102 *On the Enhancement of the Starting Capabilities of Single Phase Line-Start PMSMs*

Khaoula Bensaïda, Imen Abdennadher, and Ahmed Masmoudi
University of Sfax, Tunisia

Fabrizio Marignetti

University of Cassino and South Lazio, Italy

12H45 - 14H00: Lunch

EV3: Special Session on Mechatronic Actuators for Automotive Applications (Part 1)

14H00 - 16H00, Room Bosio

Chairs: Micheal Schier (Germany) and Armin Dietz (Germany)

EVER18-202 *In memoriam Dr. Junak*

Grzegorz Ombach
QUALCOMM CDMA Technologies GmbH, Germany

EVER18-209 *Combining Mechanical, Electrical and Thermal Energy Conversion for Ecological Vehicle Energy Harvesting Concepts*

Michael Schier, Mounir Nasri, Werner Kraft, and Nina Kevlishvili
German Aerospace Center, Germany
Johannes J.H. Paulides
Laurentiu Encica, The Netherlands

EVER18-206 *Thermal Management: From ICE to EV*

Erika Aleman
Robert Bosch GmbH, Germany

EVER18-211 *Development and Realization of an In-Wheel Suspension Concept with an Integrated Electric Drive*

Oliver Deisser, Gerhard Kopp
German Aerospace Center, Germany
Alexander Fridrich, Jens Neubeck
University of Stuttgart, Germany

EVER18-205 *Direct Drive concept for Heavy-Duty Traction Applications with the Brushless Doubly-Fed Induction Machine*

Philipp Löhdefink and Armin Dietz
Technische Hochschule Nürnberg, Germany
Andreas Möckel
Technische Universität Ilmenau, Germany

EVER18-212 *Winding Insulation Improvement by Thin Film Metalized Winding Head Support for Fast Switching SiC-Voltage Inverters*

F. Liebetau, C. Weber, C. Wachter, F. Rinderknecht, H.-E. Friedrich
German Aerospace Center, Germany

EVER18-207 *Direct Current Control Method for Three-Phase Motor Drives*

Markus Schäfer, Martin Hofmann, Fabian Bayer, Bernhard Müller, and Ansgar Ackva
University of Applied Sciences Wuerzburg-Schweinfurt, Germany

RE2: Lecture Session on Renewable/Conventional Energy Association and SMART Grids

14H00 - 16H00, Room Scotto

Chairs: Elisabetta Tedeschi (Norway) and Guoli Li (China)

EVER18-08 *Optimal Operation of PV-Diesel-Battery MG Based on Fuzzy Comprehensive Evaluation*

Qian Zhang

Anhui University, China

Guoli Li

Engineering Research Center of Power Quality, China

Jinjin Ding

Anhui Electric Power Research Institute, China

EVER18-18 *Elaboration and Characterization of Silicon Nanowires for Photovoltaic Application*

Babacar Dieng, Modou Beye, and Amadou Seidou Maiga

Gaston Berger University of Saint Louis, Senegal

Moussa Touré and Diouma Kobor

University of Ziguinchor, Senegal

EVER18-39 *Comparison of Market Operation Strategies for Photovoltaic Power Plants with Storage Systems Providing Frequency Ancillary Services*

Amaia González-Garrido, Andoni Saez-de-Ibarra, Haizea Gaztañaga, and Aitor Milo

IK4-Ikerlan Technology Research Centre, Spain

Pablo Eguia

University of the Basque Country, Spain

EVER18-63 *Optimal Economic Operation Strategy of Wind Turbine-Diesel Unit with Pumped Hydro Energy Storage*

Sengthavy Phommixay, Mamadou Lamine Doumbia, and David Lupien St-Pierre

Université du Québec à Trois-Rivières, Canada

EVER18-71 *Small Wind Turbines in Smart Grids: Transformation of Electrical Machines in Permanent Magnet Synchronous Generators*

J.S. Artal-Sevil, R. Dufo, J.A. Domínguez and J.L. Bernal-Agustín

University of Zaragoza, Spain

EVER18-89 *Hydrogen Vector in the Exploitation of a Wind Farm*

Abdoulaye Koita, Alireza Payman, Mamadou-Bailo Camara, and Brayima Dakyo

Université du Havre, France

Daniel Hissel

Université Bourgogne Franche-Comté, France

EV4: Lecture Session on Battery Modelling, Characterization, and Charging Infrastructure

14H00 - 16H00, Room Poulenc 1

Chairs: Antonino Oscar Di Tommaso (Italy) and Igor Bolvashenkov (Germany)

EVER18-07 *Thermal Modelling of Lithium Ion Batteries for Temperature Rise Predictions in Hybrid Vehicle Application*

Balaji Ravichandran Vignesh, Thomas Grandjean, Andrew McGordon, and David Greenwood
University of Warwick, UK

EVER18-19 *Cloud-Connected Battery Management for Decision Making on Second-Life of Electric Vehicle Batteries*

Michael Baumann, Stephan Rohr, and Markus Lienkamp
Technical University of Munich, Germany

EVER18-32 *Analyzing the Driving Load on Electric Vehicles Using Unsupervised Segmentation Models as Enabler to Determine the Time of Battery Replacement and Assess Driving Mileage*

Tam T. Nguyen, Artur Mrowca, and Barbara Moser
BMW AG, Germany

Andreas Jossen
Technical University of Munich, Germany

EVER18-58 *Design Considerations of Coil Geometries in Bidirectional Wireless Power Transfer Systems*

Myrel Alsayegh, Benedikt Schmuelling, and Markus Clemens
University of Wuppertal, Germany

EVER18-62 *Study of Battery Performance with Hardware in the Loop Simulation of a Working Vehicle*

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

EVER18-69 *Model-Based Design of a Scalable Battery Management System by Using a Low-Cost Rapid Control Prototyping System*

Sven Jacobitz, Soeren Scherler, Xiaobo Liu-Henke
Ostfalia University of Applied Sciences, Germany

16H30 - 16H30: Coffee Break

EV5: Special Session on Mechatronic Actuators for Automotive Applications (Part 2)

16H30 - 18H50, Room Bosio

Chairs: Micheal Schier (Germany) and Armin Dietz (Germany)

EVER18-213 *Electric Drives*

Elmar Hoppach
Brose Fahrzeugteile GmbH & Co. KG, Germany

EVER18-210 *Electrified Boosting Systems in Today's and Future Automotive Applications*

Gerd Spinner, Frank Dahinten, Sebastian Dauscher, Stefan Münz
BorgWarner Turbo Systems Engineering GmbH, Germany

EVER18-203 *Control of the Excitation Current of an Externally Excited Synchronous Machine supplied by an Inductive Energy Transfer System*

Stefan Köhler and Bernhard Wagner
Technische Hochschule Nürnberg Georg Simon Ohm, Germany

EVER18-201 *Method to optimize NVH-Behaviour of a Brushless Electrically Excited Synchronous Machine*

Hagen Spielmann and Horst E. Friedrich
German Aerospace Center, Germany

EVER18-204 *Parameter Identification of Star-Connected PMSMs by Means of a Sensorless Technique*

Niklas König, Emanuele Grasso, Klaus Schuhmacher, and Matthias Nienhaus
Saarland University, Germany

EVER18-208 *Dynamic Model Predictive Position Control for Linear Actuators in Automotive Applications*

Sebastian Wendel, Philipp Löhdefink, Michael Hoerner, and Armin Dietz
Technische Hochschule Nürnberg, Germany
Ralph Kennel
Technical University of Munich, Germany

EVER18-214 *Inductive Charging*

Grzegorz Ombach
QUALCOMM CDMA Technologies GmbH, Germany

RE3: Lecture Session on Renewable Energy Harvesting and Energy Efficiency in Buildings

16H30 - 19H10, Room Scotto

Chairs: Massimo Vitelli (Italy) and Brayima Dakyo (France)

EVER18-34 *The Ideal Utilization Factor: a Tool to Optimize the Energetic Performances of Resonant Electromagnetic Vibration Energy Harvesters*

Luigi Costanzo and Massimo Vitelli
Second University of Naples, Italy

EVER18-35 *Resonant Electromagnetic Vibration Harvesters applications: Optimization of P&O MPPT Technique parameters*

Luigi Costanzo and Massimo Vitelli
Second University of Naples, Italy

EVER18-73 *Modeling and Simulation of a Wave Energy Converter System. Case study: Point Absorber*

J.S. Artal-Sevil, J.A. Domínguez, H. El-Shalakany, and R. Dufo
University of Zaragoza, Spain

EVER18-171 *Experimental Investigation on Different Rainfall Energy Harvesting Structures*

Gianluca Acciari, Massimo Caruso, Michele Fricano, Antonino Imburgia, Rosario Miceli, Pietro Romano, Giuseppe Schettino, and Fabio Viola
University of Palermo, Italy

EVER18-177 *An Innovative Mechanical Motion Converter for Sea Wave Applications*

Daniele Milone, Francesco Raimondi, and Domenico Curto
University of Palermo, Italy

EVER18-04 *Optimization of Modular District Heating System for Selected Public Buildings and Neighborhoods in Visoko with Mechanical Structure Optimization of Solar Collector Holders – The CoolHeating Project*

Marin Petrovic
University of Sarajevo, Bosnia and Herzegovina
Amra Babic and Emir Fejzovic
Municipality of Visoko, Bosnia and Herzegovina

EVER18-175 *Environmental Sustainability in Non-residential Buildings by Automating and Optimization LENI Index*

Daniele Milone, Francesco Raimondi, and Domenico Curto
University of Palermo, Italy

EVER18-176 *Energy Savings for Indoor Lighting in a Shopping Mall: a Case of Study*

Vincenzo Franzitta, Daniele Milone, Francesco Maria Raimondi, Domenico Curto
University of Palermo, Italy

RE4: Lecture Session on Static Converters and their Integration in Sustainable Applications (Part 1)

16H30 - 18H30, Room Poulenc 1

Chairs: Elisabetta Tedeschi (Norway) and Alex Van den Bossche (Belgium)

EVER18-24 *Experimental Verification of the Normative Thermal Stability of a MOSFET Full Bridge Power Inverter*

Igor Bolvashenkov, Taha Lahlou, and Hans-Georg Herzog
Technical University of Munich, Germany

EVER18-27 *Comparative Reliability Analysis of a Three Phase Five Level Cascaded H-Bridge and H-Bridge with Level Doubling Network Inverter Topologies*

Taha Lahlou, Igor Bolvashenkov, and Hans-Georg Herzog
Technical University of Munich (TUM)
Aleksandr Viatkin
University of Bologna, Italy

EVER18-28 *Physical Simulation of an H-Bridge Inverter on Component-Level with Measurement Assessment*

Taha Lahlou, Robert Tiefnig, and Hans-Georg Herzog
Technical University of Munich, Germany

EVER18-29 *Space Vector Modulation for 17-Level Cascaded H-Bridge Inverter for Use in Battery Energy Storage Systems*

Taha Lahlou, Victor Ioan Muresan, and Hans Georg Herzog
Technical University of Munich, Germany

EVER18-36 *MOSFETs Used in Ideal Diode Circuits for Lundell Alternator Rectifiers*

Alex Van den Bossche
EELAB Ghent University, Belgium
Salim Haddad
Université 20 août 1955, Algeria
Dimitar Petrov
Technical University of Varna, Bulgaria

EVER18-57 *A bidirectional Dual Active Bridge Converter for V2G Applications Based on DC Microgrid*

Ioannis Skouros, Adamantios Bampoulas, and Athanasios Karlis
Democritus University of Thrace, Greece

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



Thursday April 13, 2017

Third Plenary Session

9H00 - 10H00, Room Bosio

Chairs: Elena Lomonova (The Netherlands), Imen Abdennadher (Tunisia), and Michael Schier (Germany)

EVER18-PS3 *Fractional-Slot Concentrated Windings: Trends and Perspectives*

Alberto Tassarolo
University of Trieste, Italy

10H00 - 10H30: Coffee Break

EV6: Lecture Session on Control Strategies of Electric Machines Drives

10H30 - 12H30, Room Bosio

Chairs: Frank Rinderknecht (Germany) and Fabio Viola (Italy)

EVER18-05 *Common Mode Current Suppression for Permanent Magnet Synchronous Motor Based on Model Predictive Control*

Feng Niu, Shiran Cao, and Kui Li
Hebei University of Technology, China
Jiachen Lian, Jian Zhang, and Youtong Fang
Zhejiang University, China
Ping Tan
Zhejiang University of Science and Technology, China
Hong Li
University of Chinese Academy of Science, China

EVER18-70 *Fuzzy-Logic Strategy Control for Switched Reluctance Machine*

J.A. Domínguez-Navarro, J.S. Artal-Sevil, H.A. Pascual, J.L. Bernal-Agustín
University of Zaragoza, Spain

EVER18-250 *B6-VSI Emulation-Based DTC Strategy Dedicated to B3-VSI Fed Induction Motor Drives*

Imen Nouria El Badsj, Bassem El Badsj, and Ahmed Masmoudi
University of Sfax, Tunisia

EVER18-251 *Soft-Landing Control of Low-Energy Solenoid Valve Actuators*

J.R.M. van Dam, B.L.J. Gysen, E.A. Lomonova, and M.G.L. Roes
Eindhoven University of Technology, The Netherlands

EVER18-254 *DTC of Three-Level Inverter Fed Brushless DC Motor Drives with Torque Ripple Reduction*

Rabiaa Mars, Badii Bouzidi, Bassem El Badsy, and Abderrazak Yangui
University of Sfax, Tunisia

EVER18-255 *Performance Analysis of an Advanced Bus-Clamping DTC Strategy for IM Drives*

Badii Bouzidi, Rabiaa Mars, and Bassem El Badsy
University of Sfax, Tunisia

EV7: Lecture Session on Automotive Process Design and Performance Assessment

10H30 - 12H30, Room Scotta

Chairs: Stefano Lazzari (Italy) and Eleonora Guseinoviene (Lithuania)

EVER18-23 *Predictive Reliability Control of the Safety-Critical Traction Electric Drive with Structural Redundancy*

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

EVER18-48 *Development of a Process Model for a Customized Vehicle Testing for New Vehicle Concepts in New Markets – Application Example Sub-Saharan Africa*

Sascha Koberstaedt, Maximilian Eiba, Manuel Huber, Svenja Kalt, Martin Šoltés, Markus Lienkamp
Technical University of Munich, Germany

EVER18-50 *Evaluation of Energy Consumption and Carbon Dioxide Emissions for Electric Vehicles in Nordic Climate Conditions*

Antti Lajunen
Aalto University, Finland

EVER18-81 *Thermal Management Optimization of a Heat-Pump-Based HVAC System for Cabin Conditioning in Electric Vehicles*

Giovanni De Nunzio and Antonio Sciarretta
IFP Energies nouvelles, France
Alois Steiner and Alexander Mladek
Virtual Vehicle Research Center, Austria

EVER18-87 *XERIC Climate-Control System for Energy-Efficient Electric Vehicles: First Experimental Results and Numerical Evaluation of the Overall Performance*

Carlo Isetti and Enrico Nannei
TICASS, Italy
Stefano Lazzari
DAD, Italy

EVER18-93 *Research on E-Transport Energy Consumption and Mobile Power Source Capacity Optimization Evaluating Regenerative Energy*

Oleg Lyan, Rimantas Didziokas, Eleonora Guseinoviene, Audrius Senulis, Jolanta Januteniene, and Sergej Jakovlev
Klaipeda University, Lithuania

RE5: Lecture Session on Static Converters and their Integration in Sustainable Applications (Part 2)

10H30 - 12H30, Room Poulenc 1

Chairs: Elisabetta Tedeschi (Norway) and Alireza Nami (Sweden)

EVER18-60 Study of Different Topologies of DC-DC Resonant Converters for Renewable Energy Applications

Mouncef Arazi, Alireza Payman, Mamadou Bailo Camara, and Brayima Dakyo
University of Le Havre, France

EVER18-75 Control of Modular Multilevel Cascade Converters for offshore Wind Energy Generation and Transmission

Matas Daz, Felipe Donoso, and Roberto Cardenas
University of Santiago, Chile

Andres Mora
University of Santa Mara, Chile

Mauricio Espinoza
University of Costa Rica, Costa Rica

Patrick Wheeler
University of Nottingham, United Kingdom

EVER18-92 Finite Control Set-Model Predictive Control for Power Converters Multilevel Symmetric Cascaded H-Bridge Inverters-Fed Drive

Alain Innocent Leka and Mamadou Lamine Doumbia
University Québec Trois-Rivières, Canada

Joseph Song-Manguelle,
Exxon Neftegas Limited, Russia

Venkata Yaramasu
Arizona University, USA

EVER18-100 Automotive Propulsion Drive Emulation Using Two Cascaded Inverters

Yassine Boukadida and Ahmed Masmoudi
University of Sfax, Tunisia

Giovanni Mercurio Casolino and Fabrizio Marignetti
University of Cassino and South Lazio, Italy

Alessandro Andreoli and Mariano Albanesi
Loccioni Group, Italy

EVER18-172 A Novel Method for Harmonic Mitigation for Three-Phase Five-Level Cascaded H-Bridge

Giuseppe Schettino, Antonino Oscar Di Tommaso, Patrizia Livreri, Rosario Miceli, and Fabio Viola
University of Palermo, Italy

EVER18-174 Analysis and design of bi-directional DC-DC converters for ultracapacitors management in EVs

Filippo Pellitteri, Vincenzo Castiglia, Patrizia Livreri, and Rosario Miceli
University of Palermo, Italy

12H45 - 14H00: Lunch

EV8: Lecture Session on Machine Loss Prediction, Analysis, and Electromagnetic-Thermal Coupling

14H00 - 15H40, Room Bosio

Chairs: Alberto Tessarolo (Italy) and Michel Hecquet (France)

EVER18-33 *Magnetic Losses and Thermal Analysis in a Magnetic Gear for Wind Turbine*

Melaine Desvaux, Hugo Bildstein, Bernard Multon, and Hamid Ben Ahmed

Bretagne Loire University, France

Stéphane Sire

University of Bretagne Occidentale, France

Aurélie Fasquelle

Jeumont Electric, France

EVER18-51 *A Modified Jiles-Atherton Model for Estimating the Iron Loss of Electrical Steel Considering DC Bias*

Zhaokai Li, Xiaoyan Huang, Lijian Wu, Jituo Chen, Yunlong Zhong, Jien Ma, and Youtong Fang

Zhejiang University, China

EVER18-55 *Determination of Eddy Current Losses in Permanent Magnets of SPMSM with Concentrated Windings: A Hybrid Loss Calculation Method and Experimental Verification*

T. Gerlach, L. Rabenstein, A. Dietz, and A. Kremser

Energy Campus Nuremberg, Germany

D. Gerling

University of Federal Defense, Germany

EVER18-97 *Low Power Electrical Motors Design with a Good Compromise between Ripple Torque and Radial Forces*

T. Tollance, M. Hecquet, F. Gillon, and A. Tounzi

University of Lille, France

EVER18-98 *Electromagnetic-Thermal Coupling Applied to the Analysis of the Heat Transfer in a Traction Motor*

Anis Abdelkafi and Ahmed Masmoudi

University of Sfax, Tunisia

Nicola Bianchi

University of Padova, Italy

EV9: Lecture Session on Electric Machine Design and Analysis

14H00 - 15H20, Room Scotto

Chairs: Rosario Micheli (Italy) and Michael Schier (Germany)

EVER18-103 *Characterization on the No- and On-load Operations of an Improved Claw Pole Machine*

Roua Omri, Amina Ibalá, and Ahmed Masmoudi
University of Sfax, Tunisia

EVER18-104 *3D-FEA Based-Comparison of Different Topologies of Claw-Pole Alternators with a Dual Excitation*

Roua Omri, Amina Ibalá, and Ahmed Masmoudi
University of Sfax, Tunisia

EVER18-252 *Analysis of Variable Flux Reluctance Machines Using Hybrid Analytical Modeling*

J. Bao, S. Aleksandrov, B.L.J. Gysen, and E.A. Lomonova
Eindhoven University of Technology, The Netherlands

EVER18-253 *Design of an Axial-Flux Permanent Magnet Machine for a Solar Powered Electric Vehicle*

L.A.J. Friedrich, K. Bastiaens, B.L.J. Gysen, D.C.J. Krop, and E.A. Lomonova
Eindhoven University of Technology, The Netherlands

EV10: Lecture Session on Electric Vehicles: Case Studies

14H00 - 15H20, Room Poulenc 1

Chairs: Tam Thanh Nguyen (Germany) and Hyunsoo Kim (Korea)

EVER18-14 *Electric Tractor Propelled by Renewable Energy for Small-Scale Family Farming*

Hans Heinrich Vogt and Daniel Albiero
Universidade Federal do Ceará, Brazil
Benedikt Schmuelling
University of Wuppertal, Germany

EVER18-80 *An Ergonomics and Safety Study of the aCar Electric Vehicle Design Optimization*

Martin Šoltés, Franziska Degmayr, Lukas Berger, Sascha Koberstaedt, and Markus Lienkamp
Technical University of Munich, Germany

EVER18-82 *A Case Study of a Framework for User-Centered Hardware Development Based on the aCar Electric Vehicle Project*

Martin Šoltés, Daniel Kappler, Sascha Koberstaedt, and Markus Lienkamp
Technical University of Munich, Germany

EVER18-99 *A Simple Assessment of the Dynamics of the Road Vehicles*

Yassine Boukadida and Ahmed Masmoudi
University of Sfax, Tunisia
Giovanni Mercurio Casolino and Fabrizio Marignetti
University of Cassino and South Lazio, Italy

See you in EVER2019

