

08:30 **Opening session** *Location: Hall 1*
Chair: Prof. Patrick WHEELER, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM
Co-Chair: Prof. Dr. Ir. Jean-Luc THOMAS, CONSERVATOIRE NATIONAL DES ARTS ET METIERS, FRANCE

09:00 **Keynote 1: Power Electronics for Aerospace** *Location: Hall 1*
Chair: Prof. Patrick WHEELER, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM
Co-Chair: Prof. Dr. Ir. Philippe LATAIRE, VRIJE UNIVERSITEIT BRUSSEL, BELGIUM

09:00 **0957 - Role of Power Electronics in More-Electric-Airplanes**
KARIMI Kamiar J. - THE BOEING COMPANY - UNITED STATES OF AMERICA

09:50 **LS1a: Industrial Session: the Future of the More Electric Aircraft** *Location: Hall 1*
Chair: Prof. Patrick WHEELER, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM
Co-Chair: Dipl.Ing. Jochen KOSZESCHA, ECPE - EUROPEAN CENTER FOR POWER ELECTRONICS E.V., GERMANY

09:50 **0972 - The Clean Sky JTI and the more electrical aircraft**
DEN BOER Ruud - CLEAN SKY JOINT UNDERTAKING - BELGIUM

10:25 **0974 - Challenges for power electronics in the future Electric Aircraft**
FALEIRO Lester - LIEBHERR-AEROSPACE - FRANCE

09:50 **LS1b: Topic 16: Microgrid Control** *Location: Hall 11a*
Chair: Prof. Dr. Hans-Günter ECKEL, UNIVERSITY OF ROSTOCK, GERMANY
Co-Chair: Colin DAVIDSON, ALSTOM GRID UK, UNITED KINGDOM

09:50 **0029 - Stand Alone Power Supply System under High FCs Efficiency and New Technique for Batteries Charging/Discharging**
HUSSAIN Essam - THE UNIVERSITY OF SHEFFIELD - UNITED KINGDOM
BINGHAM Chris - THE UNIVERSITY OF SHEFFIELD - UNITED KINGDOM
STONE David - THE UNIVERSITY OF SHEFFIELD - UNITED KINGDOM

10:10 **0319 - Optimization of Micro-Grid Operation by Dynamic Grid Mapping and Token Ring Control**
COSTABEBER Alessandro - UNIVERSITY OF PADOVA - ITALY
TENTI Paolo - UNIVERSITY OF PADOVA - ITALY
MATTAVELLI Paolo - VIRGINIA TECH - UNITED STATES OF AMERICA
ERSEGHE Tomaso - UNIVERSITY OF PADOVA - ITALY
TOMASIN Stefano - UNIVERSITY OF PADOVA - ITALY

10:30 **0842 - Connection and Disconnection Transients for Micro-Grids under unbalance load condition**
ROCABERT Joan - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN
AZEVEDO Gustavo M.S. - FEDERAL UNIVERSITY OF PERNAMBUCO - BRAZIL
CANDELA Jose Ignacio - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN
FREDE Blaabjerg - AALBORG UNIVERSITY - DENMARK
RODRIGUEZ Pedro - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

09:50 **LS1c: Topic 1 - SiC Devices** *Location: Hall 9*
Chair: Prof. Dr. Josef LUTZ, TU CHEMNITZ, GERMANY
Co-Chair: Uwe KIRCHNER, INFINEON TECHNOLOGIES AUSTRIA AG, AUSTRIA

09:50 **0049 - The 1200V Direct-Driven SiC JFET power switch**
SIEMIENIEC Ralf - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

KIRCHNER Uwe - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

10:10 0191 - High-Temperature Behavior of SiC Power Diodes

BUTTAY Cyril - LABORATOIRE AMPERE - FRANCE

RAYNAUD Christophe - LABORATOIRE AMPERE - FRANCE

MOREL Herve - LABORATOIRE AMPERE - FRANCE

LAZAR Mihai - LABORATOIRE AMPERE - FRANCE

CIVRAC Gabriel - LABORATOIRE AMPERE - FRANCE

BERGOGNE Dominique - LABORATOIRE AMPERE - FRANCE

10:30 0347 - Failure modes and robustness of SiC JFET transistors under current limiting operations

BERKANI Mounira - SATIE ENS CACHAN - FRANCE

OTHMAN Dhouha - SATIE ENS CACHAN / CNAM - FRANCE

LEFEBVRE Stéphane - SATIE ENS CACHAN - FRANCE

KHATIR Zoubir - IFSTTAR - FRANCE

BEN SALAH Tarek - UNIVERSITY OF TUNIS EL MANAR-ENIT-L.S.E - TUNISIA

09:50 **LS1d: Topic 6: Converter Control, Current/Voltage Control (I)**

Location: Hall 10b

Chair: Dr. Sami SIALA, CONVERTEAM, FRANCE
Co-Chair: Ir. Marcel HENDRIX, PHILIPS, NETHERLANDS

09:50 0338 - The Effects and Models of Different Updating and Sampling Concepts to the Control of Grid-Connected PWM Converters – A Study Based on Discrete Time Domain Analysis

HOFFMANN Nils - CHRISTIAN-ALBRECHTS-UNIVERSITY OF KIEL - GERMANY

DANNEHL Jörg - DANFOSS SOLAR INVERTERS A/S - GERMANY

FUCHS Friedrich W. - CHRISTIAN-ALBRECHTS-UNIVERSITY OF KIEL - GERMANY

10:10 0552 - Control Scheme for a Single Phase Hybrid Multilevel Converter using Repetitive and Resonant Control Approaches

RASHED Mohamed - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

KLUMPNER Christian - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

ASHER Greg - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

10:30 0897 - Predictive Control of a Grid-Connected Cascaded H-Bridge Multilevel Converter

CORTES Patricio - UNIVERSIDAD TECNICA FEDERICO SANTA MARIA - CHILE

QUIROZ Francisco - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

RODRIGUEZ Jose - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

09:50 **LS1e: Topic 5: High Power Multi-Level Converters and Voltage Regulator Modules (I)**

Location: Hall 6

Chair: Dr. Thierry MEYNARD, UNIVERSITY OF TOULOUSE, FRANCE
Co-Chair: Dr. Kansuke FUJII, FUJI ELECTRIC CO., LTD., JAPAN

09:50 0024 - CONTROL OF FIVE-LEVEL SINGLE-PHASE CURRENT-SOURCE INVERTERS OPERATING AT HIGH AND LOW LOAD CONDITIONS

HASSAN Bakri - NEWCASTLE UNIVERSITY - UNITED KINGDOM

PICKERT Volker - NEWCASTLE UNIVERSITY - UNITED KINGDOM

ZAHAWI Bashar - NEWCASTLE UNIVERSITY - UNITED KINGDOM

10:10 0141 - Comparison of load inverter topologies in a bipolar LVDC distribution

REKOLA Jenni - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

TUUSA Heikki - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

10:30 **0332 - Direct Modular Multi-Level Converter for Gearless Low-Speed Drives**

KORN Arthur - ABB SWITZERLAND LTD - SWITZERLAND

WINKELNKEMPER Manfred - ABB SWITZERLAND LTD - SWITZERLAND

STEIMER Peter - ABB SWITZERLAND LTD - SWITZERLAND

KOLAR Johann - ETH ZURICH - SWITZERLAND

09:50 **LS1f: Topic 17: DC and Distributed Power Supplies**

Location: Hall 10a

Chair: Prof. Dr. Leonids RIBICKIS, RIGA TECHNICAL UNIVERSITY, LATVIA

Co-Chair: Associate Professor Pericle ZANCHETTA, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM

09:50 **0784 - Analysis and Evaluation of Interleaved Class D-E Resonant Converter**

WU Li-Ming - CHING YUN UNIVERSITY - TAIWAN (China)

LUO Wei-Shi - CHING YUN UNIVERSITY - TAIWAN (China)

CHIOU Huan-Ji - LEADERELECTRONICSINC - TAIWAN (China)

10:10 **0905 - Buck Type (8kA, 10V) High Frequency Quasi Resonant Converter**

COLAK Ilknur - ISTANBUL TECHNICAL UNIVERSITY - TURKEY

10:30 **0450 - Optimisation of a Distributed Generation Power Pack Using a Novel Dynamic System Model including Efficiency Characteristics**

HILL Christopher - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

ZANCHETTA Pericle - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

BOZHKO Serhiy - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

LI Jing - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

09:50 **LS1g: Topic 12: Advanced Control Techniques**

Location: Hall 11b

Chair: Prof. Robert D. LORENZ, UNIVERSITY OF WISCONSIN-MADISON, UNITED STATES OF AMERICA

Co-Chair: Dr. Hubert SCHIERLING, SIEMENS AG, GERMANY

09:50 **0747 - Direct Torque Control and Virtual-Flux Based Direct Power Control of Current Source Converter in Wind Turbine Application**

NIKOLIC Aleksandar - ELECTRICAL ENGINEERING INSTITUTE NIKOLA TESLA - SERBIA

JEFTENIC Borislav - FACULTY OF ELECTRICAL ENGINEERING - SERBIA

10:10 **0027 - Saturation induced harmonics in permanent magnet synchronous motors**

ORLIK Thomas - TU BRAUNSCHWEIG - GERMANY

LUX Michael - TU BRAUNSCHWEIG - GERMANY

SCHUMACHER Walter - TU BRAUNSCHWEIG - GERMANY

10:30 **0929 - Flux-Weakening in IPM Motor Drives: Comparison of State-of-Art Algorithms and a Novel Proposal for Controller Design**

BOLOGNANI Silverio - UNIVERSITY OF PADOVA - DIE - ITALY

CALLIGARO Sandro - UNIVERSITY OF UDINE - DIEGM - ITALY

PETRELLA Roberto - UNIVERSITY OF UDINE - DIEGM - ITALY

POGNI Filippo - UNIVERSITY OF PADOVA - DIE - ITALY

11:10 **LS2a: Industrial Session: More Electric Aircraft technology**

Location: Hall 1

Chair: Dr. Lester FALEIRO, LIEBHERR-AEROSPACE, GERMANY

Co-Chair: Technology Manager Adrian SHIPLEY, GE AVIATION, UNITED KINGDOM

11:10 **0973 - Trends and Prospectives of Power Electronics For Next Generation Aircraft**

BOUZOURENE Arezki - THALES AVIONICS ELECTRICAL SYSTEM - GERMANY

BENSALAH Taoufik - THALES AVIONICS ELECTRICAL SYSTEM - FRANCE

CIMA Lionel - NEELOGY SA - FRANCE

COUDERETTE André - NEELOGY SA - FRANCE

11:30 **0975 - Reliability of Insulating Substrates - High Temperature Power Electronics for More Electric Aircraft**

SCHLETZ Andreas - FRAUNHOFER IISB NUREMBERG - GERMANY

11:50 **0958 - The Electrification of Aircraft: Past, Present and Future**

SHIPLEY Adrian - GE AVIATION - UNITED KINGDOM

11:10 **LS2b: Topic 16: HVDC and STATCOM**

Location: Hall 11a

Chair: Staffan NORRGA, ABB AB, CORPORATE RESEARCH, SWEDEN

Co-Chair: Dr. Electrical Engineering Pedro RODRIGUEZ, TECHNICAL UNIVERSITY OF CATALONIA, SPAIN

11:10 **0286 - Control of a Modular Multilevel Converter-based HVDC transmission system**

SOTO Diego - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

GREEN T. C. - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

11:30 **0648 - Loss Comparison of Different Sub-Module Implementations for Modular Multilevel Converters in HVDC Applications**

MODEER Tomas - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

NORRGA Staffan - ABB CORPORATE RESEARCH - SWEDEN

NEE Hans-Peter - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

11:50 **0463 - Power Quality Analysis of a Static Synchronous Compensator (STATCOM) Connected to a High Voltage Transmission Network**

LAKA Aitor - UNIVERSITY OF MONDRAGON - SPAIN

BARRENA Jon Andoni - UNIVERSITY OF MONDRAGON - SPAIN

CHIVITE-ZABALZA Francisco Javier - INGETEAM TECHNOLOGY S.A. - SPAIN

RODRIGUEZ-VIDAL Miguel Angel - INGETEAM TECHNOLOGY S.A. - SPAIN

11:10 **LS2c: Topic 1 - SiC Applications**

Location: Hall 9

Chair: Dr.-Ing. Ralf SIEMIENIEC, INFINEON TECHNOLOGIES AUSTRIA AG, AUSTRIA

Co-Chair: Dr. Dushan BOROYEVICH, VIRGINIA TECH - CPES, UNITED STATES OF AMERICA

11:10 **0326 - Experimental comparison of dc-dc boost converters with SiC JFETs and SiC bipolar transistors**

PEFTITSIS Dimosthenis - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

RABKOWSKI Jacek - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

TOLSTOY Georg - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

NEE Hans-Peter - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

11:30 **0476 - Modularized Design Consideration of a General-Purpose, High-Speed Phase-Leg PEBB based on SiC MOSFETs**

CHEN Zheng - VIRGINIA TECH - UNITED STATES OF AMERICA

DANILOVIC Milisav - VIRGINIA TECH - UNITED STATES OF AMERICA

BOROYEVICH Dushan - VIRGINIA TECH - UNITED STATES OF AMERICA

SHEN Zhiyu - VIRGINIA TECH - UNITED STATES OF AMERICA

11:50 **0493 - Fast switching 1200 V 50 A Silicon Carbide BJT's in boost converters**

LINDGREN Anders - TRANSIC AB - SWEDEN

DOMEIJ Martin - TRANSIC - SWEDEN

11:10 **LS2d: Topic 6: Converter Control, Current/Voltage Control (II)**

Location: Hall 10b

Chair: Prof. Jon CLARE, NOTTINGHAM UNIVERSITY, UNITED KINGDOM
Co-Chair: Dr. Nicolas PATIN, UNIVERSITY OF TECHNOLOGY OF COMPIEGNE, FRANCE

11:10 **0048 - Triangular Carrier Self-Alignment Using Modular Approach for Interleaved Converter Control**

COUSINEAU Marc - LAPLACE UNIVERSITY OF TOULOUSE - FRANCE
LE BOLLOCH Mathieu - LAPLACE UNIVERSITY OF TOULOUSE - FRANCE
BOUHALLI Nadia - LAPLACE UNIVERSITY OF TOULOUSE - FRANCE
SARRAUTE Emmanuel - LAPLACE UNIVERSITY OF TOULOUSE - FRANCE
MEYNARD Thierry - LAPLACE UNIVERSITY OF TOULOUSE - FRANCE

11:30 **0658 - Field Programmable Gate Array Based Control of Dual Active Bridge DC/DC converter for the UNIFLEX-PM Project**

WATSON Alan - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
WHEELER Patrick - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
CLARE Jon - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

11:50 **0911 - High Performance Stationary Frame AC Current Regulation Incorporating Transport Delay Compensation**

MCGRATH Brendan - RMIT UNIVERSITY - AUSTRALIA
PARKER Stewart - RMIT UNIVERSITY - AUSTRALIA
HOLMES Grahame - RMIT UNIVERSITY - AUSTRALIA

11:10 **LS2e: Topic 5: High Power Multi-Level Converters and Voltage Regulator Modules (II)**

Location: Hall 6

Chair: Prof. Sarath TENNAKOON, STAFFORDSHIRE UNIVERSITY, UNITED KINGDOM
Co-Chair: Prof. Dr. Juergen BIELA, ETH ZURICH, SWITZERLAND

11:10 **0430 - Controlling the AC-Side Voltage Waveform in a Modular Multilevel Converter With Low Energy-Storage Capability**

ILVES Kalle - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN
ANTONOPOULOS Antonios - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN
NORRGA Staffan - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN
ÄNGQUIST Lennart - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN
NEE Hans-Peter - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

11:30 **0492 - A Converter Topology for High Current density Drive Applications**

PERON-GUENEGUES Virginie - CONVERTEAM - FRANCE
CONILH Christophe - CONVERTEAM - FRANCE
LECLERE Loïc - CONVERTEAM - FRANCE

11:50 **0782 - 10kV/30kA Unipolar Arbitrary Voltage Source for Hardware-in-the-Loop Simulation Systems for HVDC Circuit Breakers**

CARSTENSEN Christoph - ETH ZURICH - SWITZERLAND
BIELA Jürgen - ETH ZURICH - SWITZERLAND

11:10 **LS2f: Topic 17: Contactless Power Supply and Power Factor Correction**

Location: Hall 10a

Chair: Prof. Dr. Vladimir KATIC, UNIVERSITY OF NOVI SAD, SERBIA
Co-Chair: Prof. Dr. Ir. Emmanuel TATAKIS, UNIVERSITY OF PATRAS, GREECE

11:10 **0591 - Modelling, analysis and optimisation of inductive data transmission systems for integration in contactless power supplies**

RATHGE Christian - INSTITUT F AUTOMATION U KOMMUNIKATION MAGDEBURG - GERMANY
KUERSCHNER Daniel - INSTITUT F AUTOMATION U KOMMUNIKATION MAGDEBURG - GERMANY

11:30 **0723 - A Novel Power Converter Suitable for Contactless Power Distribution with Capacitive Coupling Using Series-Connected Switched-Mode Active Negative Capacitor**

YUKI Chiku - UTSUNOMIYA UNIVERSITY - JAPAN

FUNATO Hirohito - UTSUNOMIYA UNIVERSITY - JAPAN

HARAKAWA Ken-ichi - TAKENAKA CORPORATION - JAPAN

MIURA Kazuyuki - TAKENAKA CORPORATION - JAPAN

11:50 **0121 - Efficiency and hardware comparison of analog control-based and digital control-based 70 W two-stage power factor corrector and DC-DC converters**

TÖRÖK Lajos - AALBORG UNIVERSITY - DENMARK

MUNK-NIELSEN Stig - AALBORG UNIVERSITY - DENMARK

11:10 LS2g: Topic 12: Sensorless Techniques

Location: Hall 11b

Chair: Prof. Dr. Bernhard PIEPENBREIER, UNIVERSITÄT ERLANGEN, GERMANY

Co-Chair: Prof. Greg ASHER, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM

11:10 **0106 - Encoderless Field-Oriented Control of a Synchronous Reluctance Machine with an Estimator in Polar Stator-Current Coordinates**

STUMPER Jean-François - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

PAULUS Dirk - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

KENNEL Ralph - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

11:30 **0474 - Surface Permanent Magnet Synchronous Machine Self-Sensing Position Estimation at Low Speed Using Eddy Current Reflected Asymmetric Resistance**

YANG Shih-Chin - UNIVERSITY OF WISCONSIN-MADISON - UNITED STATES OF AMERICA

LORENZ Robert - UNIVERSITY OF WISCONSIN-MADISON - UNITED STATES OF AMERICA

11:50 **0511 - High Performance Position Sensorless Control Using Rotating Voltage Signal Injection in IPMSM**

KIM Sungmin - SEOUL NATIONAL UNIVERSITY - KOREA

SUL Seung-Ki - SEOUL NATIONAL UNIVERSITY - KOREA

12:20 LS3a: Topic 19: Aerospace and Space Applications

Location: Hall 1

Chair: Prof. Dr. Marcel JUFER, EPFL, SWITZERLAND

Co-Chair: Dr. Alberto CASTELLAZZI, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM

12:20 **0238 - Solid state circuit breakers enabling optimised protection of DC aircraft power systems**

FLETCHER Steven - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

NORMAN Patrick - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

GALLOWAY Stuart - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

BURT Graeme - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

12:40 **0257 - Piezoelectric 10W DC/DC converter for space applications**

LIU Yuan-Ping - SATIE ENS CACHAN - FRANCE

VASIC Dejan - SATIE ENS CACHAN - FRANCE

COSTA Francois - SATIE ENS CACHAN - FRANCE

SCHWANDER Denis - CNES TOULOUSE - FRANCE

13:00 **0804 - Design and optimization techniques for the current return path in a composite aircraft**

GOLEANU Anca Lucia - SAFRAN ENGINEERING SERVICES - FRANCE

GUICHON Jean Michel - G2ELAB - FRANCE

DUNAND Michel - SAFRAN ENGINEERING SERVICES - FRANCE

GLIZE Pierre - IRIT TOULOUSE - FRANCE
FREYCON Arthur - SAFRAN ENGINEERING SERVICES - FRANCE
SCHANEN Jean-Luc - G2ELAB - FRANCE
COULOMB Jean-Louis - G2ELAB - FRANCE

12:20 **LS3b: Topic 16: HVDC Transmission**

Location: Hall 11a

Chair: Prof. Dr. Lennart HARNEFORS, ABB, SWEDEN
Co-Chair: Dr. Oriol GOMIS-BELLMUNT, IREC, SPAIN

12:20 **0550 - Operation and control of VSC-HVDC multiterminal grids for offshore wind**

EGEA-ALVAREZ Agusti - CITCEA-UPC - SPAIN
JUNYENT-FERRE Adria - CITCEA-UPC - SPAIN
GOMIS-BELLMUNT Oriol - CITCEA-UPC - SPAIN
LIANG Jun - CARDIFF UNIVERSITY - UNITED KINGDOM
EKANAYAKE Janaka - CARDIFF UNIVERSITY - UNITED KINGDOM
JENKINS Nicholas - CARDIFF UNIVERSITY - UNITED KINGDOM

12:40 **0508 - Comparison of Direct Voltage Control Methods of Multi-Terminal DC (MTDC) Networks through Modular Dynamic Models**

TEIXEIRA PINTO Rodrigo - TECHNISCHE UNIVERSITEIT DELFT - NETHERLANDS
FRAGOSO RODRIGUES Silvio - INSTITUTO SUPERIOR TÉCNICO DA UNIVERSIDADE TÉCNICA - PORTUGAL
BAUER Pavol - TECHNISCHE UNIVERSITEIT DELFT - NETHERLANDS
PIERIK Jan - ECN - ENERGY RESEARCH CENTRE OF THE NETHERLANDS - NETHERLANDS

13:00 **0638 - Prospects and Challenges of Future HVDC SuperGrids with Modular Multilevel Converters**

AHMED Noman - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
HAIDER Arif - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
VAN HERTEM Dirk - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
ZHANG Lidong - ABB CORPORATE RESEARCH - SWEDEN
NEE Hans-Peter - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

12:20 **LS3c: Topic 1 - Device Ruggedness and Control**

Location: Hall 9

Chair: Noel SHAMMAS, STAFFORDSHIRE UNIVERSITY, UNITED KINGDOM
Co-Chair: Prof. Dr. Hirofumi AKAGI, TOKYO INSTITUTE OF TECHNOLOGY, JAPAN

12:20 **0165 - Negative differential miller capacitance during switching transients of IGBTs**

BOEHMER Juergen - UNIVERSITY OF ROSTOCK - GERMANY
SCHUMANN Joerg - UNIVERSITY OF ROSTOCK - GERMANY
ECKEL Hans-Guenter - UNIVERSITY OF ROSTOCK - GERMANY

12:40 **0426 - The Influence of Asymmetries on the Parallel Connection of IGBT Chips under Short-Circuit Condition**

BASLER Thomas - CHEMNITZ UNIVERSITY OF TECHNOLOGY - GERMANY
LUTZ Josef - CHEMNITZ UNIVERSITY OF TECHNOLOGY - GERMANY
JAKOB Roland - CONVERTEAM GMBH - GERMANY
BRÜCKNER Thomas - CONVERTEAM GMBH - GERMANY

13:00 **0676 - Active Control of Series Connected, Voltage Driven Power Devices using a Single Gate Drive**

EVANS Paul - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
TEERAKAWANICH Nithiphat - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
JOHNSON C Mark - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

12:20 **LS3d: Topic 6: Converter Control, Sets and Modulation Strategies**

Location: Hall 10b

Chair: Prof. Dr. Ralph KENNEL, TECHNISCHE UNIVERSITAET MUENCHEN, GERMANY
Co-Chair: Prof. Domenico CASADEI, UNIVERSITY OF BOLOGNA, ITALY

12:20 **0386 - A New Carrier-Based PWM Strategy with Minimum Output Current Ripple for Five-Phase Inverters**

TANI Angelo - BOLOGNA UNIVERSITY - ITALY
ZARRI Luca - BOLOGNA UNIVERSITY - ITALY
MENGONI Michele - BOLOGNA UNIVERSITY - ITALY
CASADEI Domenico - BOLOGNA UNIVERSITY - ITALY
SERRA Giovanni - BOLOGNA UNIVERSITY - ITALY

12:40 **0592 - The Circuit-Level Decoupling Modulation Strategy for Three-Level Neutral-Point-Clamped (TL-NPC) Inverter**

ZHANG Zhe - TECHNICAL UNIVERSITY OF DENMARK - DENMARK
THOMSEN Ole - TECHNICAL UNIVERSITY OF DENMARK - DENMARK
ANDERSEN Michael - TECHNICAL UNIVERSITY OF DENMARK - DENMARK

13:00 **0624 - Analytical Evaluation of Switching Characteristics in Five-Phase Drives with Discontinuous Space Vector Pulse Width Modulation Techniques**

PRIETO Joel - UNIVERSIDAD DE SEVILLA - SPAIN
BARRERO Federico - UNIVERSIDAD DE SEVILLA - SPAIN
TORAL Sergio - UNIVERSIDAD DE SEVILLA - SPAIN
JONES Martin - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM
LEVI Emil - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

12:20 **LS3e: Topic 5: High Power Multi-Level Converters and Voltage Regulator Modules (III)**

Location: Hall 6

Chair: Tore UNDELAND, NTNU, NORWAY
Co-Chair: Ing. Stephan KENZELMANN, EPFL - IEL - LEI, SWITZERLAND

12:20 **0866 - Cascaded H-Bridge with Bidirectional Boost Converters for Energy Storage**

TRINTIS Ionut - ALBORG UNIVERSITY - DENMARK
MUNK-NIELSEN Stig - AALBORG UNIVERSITY - DENMARK
TEODORESCU Remus - AALBORG UNIVERSITY - DENMARK

12:40 **0888 - Dynamic Modeling of Modular Multilevel Converters**

HARNEFORS Lennart - ABB - SWEDEN
NORRGA Staffan - ABB CORPORATE RESEARCH - SWEDEN
ANTONOPOULOS Antonios - KTH-ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
NEE Hans-Peter - KTH-ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

13:00 **0949 - A New 3-Phase Direct Modular Multilevel Converter**

MERTENS Axel - LEIBNIZ UNIVERSITAET HANNOVER - GERMANY
BARUSCHKA Lennart - LEIBNIZ UNIVERSITAET HANNOVER - GERMANY

12:20 **LS3f: Topic 17: Contactless Power Supply**

Location: Hall 10a

Chair: Prof. Dr. Leonids RIBICKIS, RIGA TECHNICAL UNIVERSITY, LATVIA
Co-Chair: Prof. Dr. Ir. Bruno ALLARD, AMPERE LAB, FRANCE

12:20 **0381 - Low Power Rectenna Topologies for Medium Range Wireless Energy Transfer**

MARIAN Vlad - AMPERE LAB - FRANCE

VOLLAIRE Christian - AMPERE LAB - FRANCE

VERDIER Jacques - INL - FRANCE

ALLARD Bruno - AMPERE, UNIVERSITE DE LYON - FRANCE

12:40 **0485 - Efficiency Improvement of Contactless Energy Transfer Systems Using Series Compensation Device Named MERS**

ISOBE Takanori - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

KOBAYASHI Kazuto - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

WAKASUGI Kazuyuki - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

SHIMADA Ryuichi - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

13:00 **0564 - Contactless Charging for Electric Vehicles with a Large Air Gap**

HO Terry Chi Young - DURHAM UNIVERSITY - UNITED KINGDOM

GOMERSALL Ben - DURHAM UNIVERSITY - UNITED KINGDOM

RAN Li - DURHAM UNIVERSITY - UNITED KINGDOM

12:20 **LS3g: Topic 13: Energy Efficiency, Energy Savings Issues (I)**

Location: Hall 11b

Chair: Dr. Ir. Sjoerd BOSGA, ABB CORPORATE RESEARCH, SWEDEN
Co-Chair: Dr. Volkmar MUELLER, TU DRESDEN, GERMANY

12:20 **0280 - High efficiency rectifier for a variable speed transverse flux permanent magnet generator for wind turbine applications**

TAGHIZADEH KAKHKI Mehdi - LAVAL UNIVERSITY - CANADA

DUBOIS Maxime - UNIVERSITÉ LAVAL - CANADA

12:40 **0603 - Multi-fidelity Simulation Modelling in Optimization of a Hybrid Submarine Propulsion System**

MOLINA-CRISTOBAL Arturo - UNIVERSITY OF CAMBRIDGE - UNITED KINGDOM

PALMER Patrick R. - UNIVERSITY OF CAMBRIDGE - UNITED KINGDOM

PARKS Geoffrey T. - UNIVERSITY OF CAMBRIDGE - UNITED KINGDOM

13:00 **0891 - Energy efficient control of induction motor servo drives with optimized motion and flux trajectories**

KLENKE Frederik - TU DRESDEN - GERMANY

HOFMANN Wilfried - TU DRESDEN - GERMANY

14:10 **DS1a: Topic 19: Electrical Systems in Aerospace, Space**

Location: Hall 3

Chair: Arnaud DAVY, AIRBUS OPERATION S.A.S., FRANCE
Co-Chair:

0002 - Radiation Prediction of Power Electronics Drive System for Electromagnetic Compatibility in Aerospace Applications

DE MAGLIE Rodolphe - LIEBHERR ELEKTRONIK GMBH - GERMANY

ENGSTLER Juergen - LIEBHERR ELEKTRONIK GMBH - GERMANY

ENGLER Alfred - LIEBHERR ELEKTRONIK GMBH - GERMANY

0009 - Stability analysis of motor drive interactions in aircraft electrical systems

JONES Catherine - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

BARNES Mike - UNIVERSITY OF MANCHESTER - UNITED KINGDOM

FORSYTH Andrew - UNIVERSITY OF MANCHESTER - UNITED KINGDOM

0158 - A Simple Adaptive Control for a Novel Voltage Bus Conditioner with Reduced Capacitive Storage

MOLLOV Stefan - THALES AVIONICS - FRANCE

0179 - 50KW- DC/DC CONVERTERS FOR APPLICATIONS IN HIGHVOLTAGE-DC-NETWORKS FOR MORE ELECTRICAL AIRCRAFTS

HOHMANN Maik - TRANSTECHNIK GMBH & CO. KG - GERMANY

0299 - Design and evaluation of state of the art rectifiers dedicated for a 46 kW E-ECS aerospace application with respect to power density and reliability

LIEBIG Sebastian - LIEBHERR ELEKTRONIK GMBH - GERMANY

LUTZ Josef - TU CHEMNITZ - GERMANY

0724 - Reliability Analysis of DC Power Distribution Network Based on Minimal Cut Sets

ZHANG Ling - NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS - CHINA

YANG Shanshui - NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS - CHINA

CAI Ling - NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS - CHINA

WANG Li - NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS - CHINA

0912 - A 2.5kV to 22V, 1kW Radar Decoy Power Supply Using Silicon Carbide Semiconductor Devices

JAIN Amit - PEREGRINE POWER LLC - UNITED STATES OF AMERICA

MCINTOSH David - PEREGRINE POWER LLC - UNITED STATES OF AMERICA

JONES Matt - PEREGRINE POWER LLC - UNITED STATES OF AMERICA

RATLIFF Brian - PEREGRINE POWER LLC - UNITED STATES OF AMERICA

0925 - BUCK AC/DC CONVERTER FOR AIRCRAFT APPLICATIONS

TAHA Mohamad - HARIRI CANADIAN UNIVERSITY - LEBANON

14:10 **DS1b: Topic 19: Electrical Systems in Surface and Marine Transport (not Road)**

Location: Hall 3

Chair: Dr. Christophe SAUDEMONT, L2EP LILLE / HEI, FRANCE
Co-Chair:

0064 - Modeling of Switching Over Voltages on Ship Service Transformers

HU Lihua - CONVERTEAM UK - UNITED KINGDOM

BUTCHER Martin - CONVERTEAM UK LTD - UNITED KINGDOM

0214 - Design, Implementation and Performance of a Modular Power Electronic Transformer (PET) for Railway Application

ZHAO Chuanhong - ABB SWITZERLAND LTD - SWITZERLAND

LEWDENI-SCHMID Silvia - ABB SWITZERLAND LTD - SWITZERLAND

STEINKE Jürgen - ABB SWITZERLAND LTD - SWITZERLAND

WEISS Michael - ABB SWITZERLAND LTD - SWITZERLAND

CHAUDHURI Toufann - ABB SECHERON - SWITZERLAND

PELLERIN Marc - ABB SECHERON - SWITZERLAND

DURON Joseph - ABB SECHERON - SWITZERLAND

STEFANUTTI Philippe - ABB SECHERON - SWITZERLAND

0259 - Assessment of Dynamic Phasors Modelling Technique for Accelerated Electric Power System Simulations

YANG Tao - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

BOZHKO Serhiy - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

ASHER Greg - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0261 - Speed-based Supercapacitor State of Charge Tracker for Light Railway Vehicles

IANNUZZI Diego - UNIVERSITY FEDERICO II NAPLES - ITALY

CICCARELLI Flavio - UNIVERSITY FEDERICO II NAPLES - ITALY

TRICOLI Pietro - UNIVERISTY FEDERICO II NAPLES - ITALY

0392 - An analytic simulation model for a supercapacitor-based energy storage system

SIRMELIS Uģis - INSTITUTE OF PHYSICAL ENERGETICS - LATVIA

GRIGANS Linards - INSTITUTE OF PHYSICAL ENERGETICS - LATVIA

LATKOVSKIS Leonards - INSTITUTE OF PHYSICAL ENERGETICS - LATVIA

0488 - FOC and DTC comparison in PMSM for railway traction application

AGUIRRE Maitane - FACULTY OF ENGINEERING, UNIVERSITY OF MONDRAGON - SPAIN

CALLEJA Carlos - IKERLAN-IK4 - SPAIN

LOPEZ DE HEREDIA Amaia - IKERLAN-IK4 - SPAIN

POZA Javier - FACULTY OF ENGINEERING, UNIVERSITY OF MONDRAGON - SPAIN

ARANBURU Aitor - TRINELEC, S. L. - SPAIN

NIEVA Txomin - TRINELEC, S. L. - SPAIN

0543 - Stator current and power factor optimization in an IPMSM for railway traction application

LOPEZ DE HEREDIA Amaia - IKERLAN-IK4 - SPAIN

LERTXUNDI Andoni - IKERLAN-IK4 - SPAIN

CALLEJA Carlos - IKERLAN-IK4 - SPAIN

ARANBURU Aitor - TRINELEC, S. L. - SPAIN

NIEVA Txomin - TRINELEC, S. L. - SPAIN

0555 - Transformer-less PWM High Power Medium Voltage Variable Speed Drive

LELEU Emmanuel - CONVERTEAM - FRANCE

LECLERE Loïc - CONVERTEAM - FRANCE

0678 - Vector Control of Primary Active Rectifiers in Traction Converter with Medium-Frequency Transformer

BLAHNIK Vojtech - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

ZAK Jan - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

PEROUTKA Zdenek - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

0706 - Incorporation of Non-linear Dynamics to the Observability Formulation of Shipboard Power Systems

JIMENEZ Juan - DREXEL UNIVERSITY - UNITED STATES OF AMERICA

DAFIS Chris - NAVAL SURFACE WARFARE CENTER - UNITED STATES OF AMERICA

NWANKPA Chika - DREXEL UNIVERSITY - UNITED STATES OF AMERICA

MIU Karen - DREXEL UNIVERSITY - UNITED STATES OF AMERICA

0819 - A New Method for AC Traction Drive Frequency Characteristics Measurement

GLASBERGER Tomas - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

PEROUTKA Zdenek - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

JANDA Martin - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

MAJORSZKY Jan - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

0829 - Supercapacitors-Based Energy Storage for Urban Mass Transit Systems.

CICCARELLI Flavio - UNIVERSITY FEDERICO II NAPLES - ITALY

IANNUZZI Diego - UNIVERSITY FEDERICO II NAPLES - ITALY

LAURIA Davide - UNIVERSITY FEDERICO II NAPLES - ITALY

0850 - Power Flow Management design for an Electric Propulsion System of a Hybrid Catamaran

SGARBOSSA Luca - UNIVERSITY OF PADOVA - ITALY

FAGGION Adriano - UNIVERSITY OF PADOVA - ITALY

BOLOGNANI Silverio - UNIVERSITY OF PADOVA - ITALY

0930 - BUDDY BIDIRECTIONAL SUPPLY FOR TRACTION SUBSTATIONS

DE JAGER Will - IMTECH HIGH VOLTAGE & ENERGY SYSTEMS - NETHERLANDS

14:10 **DS1c: Topic 16: Microgrid Control and HVDC Transmission**

Location: Hall 3

Chair: Prof. Dr. Hans-Günter ECKEL, UNIVERSITY OF ROSTOCK, GERMANY
Co-Chair:

0044 - Control Strategies of Microgrid with Hybrid DC and AC Buses

DONG Bo - TSINGHUA UNIVERSITY - CHINA

LI Yongdong - TSINGHUA UNIVERSITY - CHINA

ZHENG Zhixue - TSINGHUA UNIVERSITY - CHINA

XU Lie - TSINGHUA UNIVERSITY - CHINA

0094 - CONTROL STRATEGIES OF DC-BASED OFFSHORE WIND FARM

MONJEAN Pascal - CONVERTEAM - L2EP - FRANCE

DELANOE Jérôme - CONVERTEAM - FRANCE

MARIN Daniel - HEI - FRANCE

AUGUSTE Jérôme - CONVERTEAM - FRANCE

SAUDEMONT Christophe - HEI - FRANCE

ROBYNS Benoît - HEI - FRANCE

0115 - Comparison of the Semiconductor Losses in Self Commutated Inverter Topologies for HVDC Applications

ECKEL Hans-Günter - UNIVERSITY OF ROSTOCK - GERMANY

RUNGE Jan - UNIVERSITÄT ROSTOCK - GERMANY

0300 - Design of a Sustainable Residential Microgrid System Including PHEV and Energy Storage Device

ROGGIA Leandro - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

RECH Cassiano - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

SCHUCH Luciano - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

BAGGIO José Eduardo - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

HEY Hélio Leães - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

PINHEIRO José Renes - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

0364 - Modeling and Simulation of Heat Pump Air Conditioning Unit Intending Energy Capacity Reduction of Energy Storage System in Microgrid

KAWACHI Shunsuke - UNIVERSITY OF TOKYO - JAPAN

BABA Jumpei - UNIVERSITY OF TOKYO - JAPAN

HAGIWARA Hiroto - UNIVERSITY OF TOKYO - JAPAN

NUMATA Shigeo - SHIMIZU CORPORATION - JAPAN

SHIMODA Eisuke - SHIMIZU CORPORATION - JAPAN

FURUKAWA Kei - SHIMIZU CORPORATION - JAPAN

0380 - DC-Link Voltage Ripple Minimization in a Hybrid Modular Multilevel Voltage Source Converter for HVDC Power Transmission

TOMASINI Matteo - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
FELDMAN Ralph - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
CLARE Jon C. - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
WHEELER Pat - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
TRAINER David R. - ALSTOM GRID - UNITED KINGDOM
WHITEHOUSE Robert S. - ALSTOM GRID - UNITED KINGDOM

0412 - Wireless communication system for microgrids management in islanding

LLARIA Alvaro - UNIVERSIDAD DEL PAIS VASCO (UPV/EHU) - SPAIN
CUREA Octavian - ESTIA - FRANCE
JIMÉNEZ Jaime - UNIVERSIDAD DEL PAIS VASCO (UPV/EHU) - SPAIN
MARTÍN José Luis - UNIVERSIDAD DEL PAIS VASCO (UPV/EHU) - SPAIN
ZULOAGA Aitzol - UNIVERSIDAD DEL PAIS VASCO (UPV/EHU) - SPAIN

0420 - Implementation of harmonic control for a 3-phase 4-wire inverter with harmonic-loaded neutral

MA Yanyun - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY
ELLINGER Thomas - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY
PETZOLDT Jürgen - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY

0480 - A Novel Parallel Voltage and Current Control Scheme Implementing P-F and Q-V Droop in a Microgrid

ROWE Christopher - UNIVERSITY OF NEWCASTLE, AUSTRALIA - AUSTRALIA
SUMMERS Terrence - UNIVERSITY OF NEWCASTLE, AUSTRALIA - AUSTRALIA
BETZ Robert - UNIVERSITY OF NEWCASTLE, AUSTRALIA - AUSTRALIA

0580 - Fractional-Order Based Droop Control Of An Universal Wind-Turbine System

RICCHIUTO Domenico - POLITECNICO DI BARI - ITALY
LISERRE Marco - POLITECNICO DI BARI - ITALY
MASTROMAURO Rosa Anna - POLITECNICO DI BARI - ITALY
DELL'AQUILA Antonio - POLITECNICO DI BARI - ITALY
PIGAZO Alberto - UNIVERSITY OF CANTABRIA - SPAIN

0640 - A comparison of Two Methods of Estimating Losses in the M2C Converter

OATES Colin - ALSTOM GRID - UNITED KINGDOM
DAVIDSON Colin - ALSTOM GRID - UNITED KINGDOM

0764 - Comparison of Power Converter Circuits for HVDC with SMES

ZARCHI Linn - OSAKA UNIVERSITY - JAPAN
ISE Toshifumi - OSAKA UNIVERSITY - JAPAN
MIURA Yushi - OSAKA UNIVERSITY - JAPAN
KAKIGANO Hiroaki - OSAKA UNIVERSITY - JAPAN

0801 - Small Signal Modelling and Stability Analysis of Multiterminal VSC-HVDC

ALSSEID Aleisawee - ABERDEEN UNIVERSITY - UNITED KINGDOM

0907 - Diode Based HVDC Link for the Connection of Large Off-shore Wind Farms with Self Start Capability

BLASCO-GIMENEZ Ramon - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
ANYO-VILLALBA Salvador - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
RODRIGUEZ-DERLEE Johel - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
BERNAL-PEREZ Soledad - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN

0914 - Autonomous Operation of Hybrid Microgrid with AC and DC Sub-Grids

LOH Poh Chiang - NANYANG TECHNOLOGICAL UNIVERSITY - SINGAPORE

BLAABJERG Frede - AALBORG UNIVERSITY - DENMARK

14:10 **DS1d: Topic 16: FACTS, D-FACTS, Protections Devices and Reliability Issues**

Location: Hall 3

Chair: Prof. Leon TOLBERT, THE UNIVERSITY OF TENNESSEE, UNITED STATES OF AMERICA

Co-Chair:

0067 - STATCOM SIZE OPTIMIZATION THROUGH WIND TURBINE OPERATION WITH FIXED POWER FACTOR

THURNHERR Tobias - ABB SWITZERLAND LTD - SWITZERLAND

MAIBACH Philippe - ABB SWITZERLAND LTD - SWITZERLAND

RITTER Carsten - ABB SWITZERLAND LTD - SWITZERLAND

SALEH Mohamed - ABB SWITZERLAND LTD - SWITZERLAND

0135 - Application of a Power Electronic Based Fault Current Limiter (FCL) to Reduce Arc Flash Energy in Electrical Grids with High Short-Circuit Power

WEILAND Manuel - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

SCHÖN André - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

HEROLD Gerhard - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

0197 - Optimizing Broadband Harmonic Filter Design for Adjustable Speed Drive Systems

ZUBI Hazem - UNIVERSITY OF BATH - UNITED KINGDOM

DUNN Roderick - UNIVERSITY OF BATH - UNITED KINGDOM

ROBINSON Francis - UNIVERSITY OF BATH - UNITED KINGDOM

0475 - Novel Phase Shifted Carrier Modulation for a Cascaded H-bridge Multi-level StatCom

TOWNSEND Chris - UNI - AUSTRALIA

SUMMERS Terrence - UNIVERSITY OF NEWCASTLE - AUSTRALIA

BETZ Robert - UNIVERSITY OF NEWCASTLE - AUSTRALIA

0571 - Reducing Passive Filter Sizes with Tuned Traps for Distribution Level Power Electronics

BLOEMINK Jeffrey - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

GREEN Tim - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

0590 - Fast Acting Autonomous and Rugged Shunt Protection against Open Circuit Faults in High Power Conversion

TENCA Pierluigi - ABB CORPORATE RESEARCH - SWEDEN

0701 - Robust control of UPFC for MV distribution grid interconnection under unbalanced conditions

BOYRA Maialen - SUPELEC - FRANCE

THOMAS Jean-Luc - CNAM - FRANCE

ABDELKRIM Benchaib - ALSTOM GRID - FRANCE

0756 - Comparison of Multilevel Converter-Based STATCOMs

VIVAS Jose - USB - VENEZUELA

BERGNA Gilbert - SUPELEC - EDF - FRANCE

BOYRA Maialen - SUPELEC - EDF - FRANCE

0915 - An new methodology to optimize the efficiency of a multi-sources and multi-converters system under harmonic constraints. Application to light rail systems

VIAL Rémi - G2ELAB - FRANCE
RIU Delphine - G2ELAB - FRANCE
RETIERE Nicolas - G2ELAB - FRANCE

0916 - Practical Evaluation of Rectangular-Voltage-Fed Distribution System Loaded by Choke-Input Type Three-Phase Diode Rectifier Through Delta/Star Winding Isolation Transformer

NISHIDA Yasuyuki - CHIBA INSTITUTE OF TECHNOLOGY - JAPAN
OHYAMA Hiromichi - CHIBA INSTITUTE OF TECHNOLOGY - JAPAN
TAKESHITA Takaharu - NAGOYA INSTITUTE OF TECHNOLOGY - JAPAN

0924 - Design and Control of a Novel Dynamic Hybrid VAR Compensator

ARZANI Ali - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
DIJKHUIZEN Frans - ABB CORPORATE RESEARCH - SWEDEN
NEE Hans-Peter - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

14:10 **DS1e: Topic 16: Active Filtering and Other Advanced Grid Side Converter Control**

Location: Hall 3

Chair: Dr. Henrique GONCALVES, UNIVERSITY OF MINHO, PORTUGAL
Co-Chair:

0046 - Commutation effect of Adjustable Speed Drives due to installation of Active Harmonic Filters

ASIMINOAEI Lucian - DANFOSS POWER ELECTRONICS - DENMARK
KALASCHNIKOW Sergej - DANFOSS DRIVES - UNITED STATES OF AMERICA
HANSEN Steffan - DANFOSS POWER ELECTRONICS A/S - DENMARK
BLAABJERG Frede - AALBORG UNIVERSITY - DENMARK

0055 - Power Quality Conditioner with Series-Parallel Compensation Applied to Single-Phase Systems

BARRIVIERA Rodrigo - FEDERAL INSTITUTE OF PARANÁ – IFPR - BRAZIL
SILVA Sergio - FEDERAL TECHNOLOGICAL UNIVERSITY OF PARANÁ – UTFPR - BRAZIL
MODESTO Rodrigo - FEDERAL TECHNOLOGICAL UNIVERSITY OF PARANÁ – UTFPR - BRAZIL
GOEDEL Alessandro - FEDERAL TECHNOLOGICAL UNIVERSITY OF PARANÁ – UTFPR - BRAZIL
KASTER Maurício - FEDERAL TECHNOLOGICAL UNIVERSITY OF PARANÁ – UTFPR - BRAZIL

0215 - Test Platform of Smart Grids with Renewable Energy Systems and Plug-in Hybrid Electric Vehicles

CHENG Yonghua - VITO -FLEMISH INSTITUTE FOR TECHNOLOGICAL RESEARCH - BELGIUM

0232 - A new control method for eliminating the 2nd harmonic at the DC link of a shunt APF under an unbalanced and nonlinear load

DANG Pengpai - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY
PETZOLDT Jürgen - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY

0285 - Ramp Based Control of DVR to Mitigate Voltage Sags/Swells

KANNAIAN Sridhar - IIT MADRAS - INDIA
MISHRA Mahesh Kumar - IIT MADRAS - INDIA

0325 - A 4-Limb Flying Capacitor - Based Active Power Filter for Unbalanced Distribution Networks

WAITE Michael - UNIVERSITY OF LEEDS - UNITED KINGDOM
ZHANG Li - UNIVERSITY OF LEEDS - UNITED KINGDOM

0356 - A Novel AC-AC Shunt Active Power Filter without Large Energy Storage Elements

LIU Quanwei - ZHEJIANG UNIVERSITY - CHINA
DENG Yan - ZHEJIANG UNIVERSITY - CHINA

HE Xiangning - ZHEJIANG UNIVERSITY - CHINA

0440 - A Predictive Dead-Beat PI Current Controller for Active Power Filters

ZHOU Zhongfu - SWANSEA UNIVERSITY - UNITED KINGDOM

WANG Chun - SWANSEA UNIVERSITY - UNITED KINGDOM

IGIC Petar - SWANSEA UNIVERSITY - UNITED KINGDOM

0444 - Transformerless Series Active Power Filter to Compensate Voltage Disturbances

PINTO Gabriel - UNIVERSITY OF MINHO - PORTUGAL

AFONSO João - UNIVERSITY OF MINHO - PORTUGAL

COUTO Carlos - UNIVERSITY OF MINHO - PORTUGAL

CARNEIRO Helder - UNIVERSITY OF MINHO - PORTUGAL

EXPOSTO Bruno - UNIVERSITY OF MINHO - PORTUGAL

0447 - Single-Phase Series Active Conditioner Active Power Flow in a Harmonic Free Electrical System during Sag and Swell Events

CARNEIRO Helder - UNIVERSITY OF MINHO - PORTUGAL

EXPOSTO Bruno - UNIVERSITY OF MINHO - PORTUGAL

GONCALVES Henrique - UNIVERSITY OF MINHO - PORTUGAL

GABRIEL Pinto - UNIVERSITY OF MINHO - PORTUGAL

AFONSO João Luiz - UNIVERSITY OF MINHO - PORTUGAL

0457 - Two Control Strategies Comparison of a Three Phase Shunt Active Power Filter for Power Quality Improvement with experimental validation

GAUBERT Jean-Paul - UNIVERSITY OF POITIERS - FRANCE

0619 - Supporting Unbalanced Grids with Induction Machine Drives by Inverters without Intermittent Energy Storage

KRISCHAN Klaus - GRAZ UNIVERSITY OF TECHNOLOGY - AUSTRIA

SEEBACHER Roland - GRAZ UNIVERSITY OF TECHNOLOGY - AUSTRIA

MUETZE Annette - GRAZ UNIVERSITY OF TECHNOLOGY - AUSTRIA

0670 - FRT Capability of Direct Power Controlled Converters connected by an Actively Damped LCL-Filter for Wind Power Applications

REESE Jan - UNIVERSITY OF KIEL - GERMANY

LOHDE Ralf - UNIVERSITY KIEL - GERMANY

FUCHS Friedrich W. - UNIVERSITY KIEL - GERMANY

0833 - Reduction of High Frequency zero sequence harmonics in parallel connected PV-inverters

MAURI Marco - POLITECNICO DI MILANO - ITALY

CARMELI Maria Stefania - POLITECNICO DI MILANO - ITALY

FROSIO Luisa - POLITECNICO DI MILANO - ITALY

MARCHEGIANI Gabriele - MCM ENERGYLAB - ITALY

BEZZOLATO Alberto - POLITECNICO DI MILANO - ITALY

0913 - A Three-Phase Hybrid Filter for Medium Voltage Applications Using an H-Bridge

CANDELA Ignacio - UPC - SPAIN

RODRIGUEZ Pedro - UPC - SPAIN

NISAK Khairul - UNIVERSITAT POLITECNICA DE CATALUNYA - SPAIN

RAUMA Kalle - UPCTECHNICAL UNIVERSITY OF CATALONIA - SPAIN

HERMOSO J. Ramón - UPC TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

ETXEBERRIA Ion - IKERLAN - SPAIN

14:10 **DS1f: Topic 1: MOS Controlled Silicon Power Devices**

Location: Hall 3

Chair: Prof. Dr. Ir. stephane AZZOPARDI, IMS LAB, FRANCE
Co-Chair:

0019 - A 6-in-1 IGBT module performance evaluation platform determining the trade-off between dV/dt and turn-on loss of different IGBT / FwDi chip setups

HONSBURG Marco - MITSUBISHI ELECTRIC EUROPE B.V. - GERMANY

RADKE Thomas - MITSUBISHI ELECTRIC EUROPE B.V. - GERMANY

0041 - Enhanced TFTs Model Using Novel Nano-Composite High-K Gate Dielectric

MOHAMED Ahmed - SOUTH VALLEY UNIVERSITY - EGYPT

MOBARAK Youssef - SOUTH VALLEY UNIVERSITY - EGYPT

ATEF Moamed - SOUTH VALLEY UNIVERSITY - EGYPT

0159 - Introduction of a hybrid MOSFET-IGBT power switching device utilising a novel Schottky biased minority carrier injector

WESTMORELAND Martin - WARWICK UNIVERSITY - UNITED KINGDOM

WARD Peter - ANVIL SEMICONDUCTORS LTD - UNITED KINGDOM

MAWBY Philip - UNIVERSITY OF WARWICK - UNITED KINGDOM

0228 - Suitable Operation Conditions for Different 100V Trench-Based Power MOSFETs in 48V-input Synchronous Buck Converters

ROIG Jaume - ON SEMICONDUCTOR - BELGIUM

LEE David - ON SEMICONDUCTOR - UNITED STATES OF AMERICA

BAUWENS Filip - ON SEMICONDUCTOR - BELGIUM

BURRA Bhavani - ON SEMICONDUCTOR - UNITED STATES OF AMERICA

RINALDI Angela - ON SEMICONDUCTOR - BELGIUM

MCDONALD Jason - ON SEMICONDUCTOR - UNITED STATES OF AMERICA

DESOETE Bart - ON SEMICONDUCTOR - BELGIUM

0253 - A Robust Top Structure Design in a Field-Stop Emitter-Implant Trench-Gate IGBT for Improved Short Circuit Ruggedness.

ALESSANDRIA Antonino Sebastiano - STMICROELECTRONICS - ITALY

FRAGAPANE Leonardo - STMICROELECTRONICS - ITALY

0310 - Comparison of chip- and module-measurements with high power IGBTs and RC-IGBTs

ECKEL Hans-Günter - UNIVERSITY OF ROSTOCK - GERMANY

WIGGER Daniel - UNIVERSITY OF ROSTOCK - GERMANY

0389 - New 1700V SPT+ IGBT and Diode Chip Set with 175°C Operating Junction Temperature

CORVASCE Chiara - ABB SWITZERLAND LTD. - SWITZERLAND

KOPTA Arnost - ABB SWITZERLAND LTD. - SWITZERLAND

VOBECKY Jan - ABB SWITZERLAND LTD. - SWITZERLAND

RAHIMO Munaf - ABB SWITZERLAND LTD. - SWITZERLAND

GEISSMANN Silvan - ABB SWITZERLAND LTD. - SWITZERLAND

SCHNELL Raffael - ABB SWITZERLAND LTD. - SWITZERLAND

0449 - Investigation of mechanical stress effect on electrical behavior of Trench Punch Through IGBT under short-circuit condition at low and high temperature

AZZOPARDI Stephane - IMS LAB - UNIVERSITY OF BORDEAUX - FRANCE
ELBOUBKARI Kamal - IMS LAB - UNIVERSITY OF BORDEAUX - FRANCE
BELMEHDI Yassine - IMS LAB - UNIVERSITY OF BORDEAUX - FRANCE
DELETAGE Jean-Yves - IMS LAB - UNIVERSITY OF BORDEAUX - FRANCE
WOIRGARD Eric - IMS LAB - UNIVERSITY OF BORDEAUX - FRANCE

0657 - Temperature adaptive IGBT gate-driver design

WU Ting - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
CASTELLAZZI Alberto - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0729 - Comparison of Press-Pack IGBT at Hard Switching and Clamp Operation for Medium Voltage Converters

ALVAREZ Rodrigo - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY
FILSECKER Felipe - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY
BERNET Steffen - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY

0811 - Characterization of a New 1.2 kV IGBT 3L-NPC Phase-leg Module for Low Voltage Applications

SPRENGER Michael - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY
ALVAREZ Rodrigo - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY
BERNET Steffen - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY
STAUDT Ingo - SEMIKRON - GERMANY

0813 - Improvements in SOA Ruggedness of 6.5 kV IGBTs

BHATNAGAR Praneet - DYNEX SEMICONDUCTORS - UNITED KINGDOM
WAIND Peter - DYNEX SEMICONDUCTORS - UNITED KINGDOM
COULBECK Lee - DYNEX SEMICONDUCTORS - UNITED KINGDOM
DEVINY Ian - DYNEX SEMICONDUCTORS - UNITED KINGDOM
THOMSON Jim - DYNEX SEMICONDUCTORS - UNITED KINGDOM

0947 - A monolithically integrated vertical bidirectional IGBT having all the main electrodes on the front side

TAHIR Hakim - LAAS-CNRS - FRANCE
BOURENNANE Abdelhakim - LAAS-CNRS - FRANCE
SANCHEZ Jean-Louis - LAAS-CNRS - FRANCE

14:10 **DS1g: Topic 1: Wide Bandgap Power Semiconductor Devices**

Location: Hall 3

Chair: Prof. Dominique BERGOGNE, UNIVERSITE DE LYON, UCBL, CNRS, FRANCE
Co-Chair:

0104 - Analysis of Energy Losses for SiC and Si Diodes in Half-bridge Modules and Future Applications

SIERRA M. Teresa - TECNALIA-ENERGY - SPAIN
GABIOLA Igor - TECNALIA-ENERGY - SPAIN
PUJANA Ainhoa - TECNALIA-ENERGY - SPAIN
APIÑANIZ Susana - TECNALIA-ENERGY - SPAIN
IBAÑEZ Pedro - TECNALIA-ENERGY - SPAIN

0489 - A Multi-Physics Model of the VJFET With a Lateral Channel

MOREL Hervé - UNIVERSITE DE LYON, INSA LYON, CNRS - FRANCE
HAMIEH Youness - UNIVERSITE DE LYON, INSA LYON, CNRS - FRANCE
TOURNIER Dominique - UNIVERSITE DE LYON, INSA LYON, CNRS - FRANCE

ROBUTEL Rémi - UNIVERSITE DE LYON, INSA LYON, CNRS - FRANCE
DUBOIS Fabien - HISPANO-SUIZA - FRANCE
RISALETTO Damien - UNIVERSITE DE LYON, INSA LYON, CNRS - FRANCE
MARTIN Christian - UNIVERSITE DE LYON, LYON I, CNRS - FRANCE
BERGOGNE Dominique - UNIVERSITE DE LYON, LYON I, CNRS - FRANCE
BUTTAY Cyril - UNIVERSITE DE LYON, INSA LYON, CNRS - FRANCE
MEURET Régis - HISPANO-SUIZA - FRANCE

0570 - Simulation and Analysis of Low-Resistance AlGaN/GaN HFET Power Switches

REINER Richard - IAF FRAUNHOFER - GERMANY
BENKHELIFA Fouad - IAF FRAUNHOFER - GERMANY
KRAUSSE Daniel - IAF FRAUNHOFER - GERMANY
QUAY Rüdiger - IAF FRAUNHOFER - GERMANY
AMBACHER Oliver - IAF FRAUNHOFER - GERMANY

0596 - Perspectives of high-voltage SiC-semiconductors in high power conversion systems for wind and photovoltaic sources

ARAÚJO Samuel - UNIVERSITY OF KASSEL - KDEE - GERMANY
ZACHARIAS Peter - UNIVERSITY OF KASSEL - KDEE - GERMANY

0674 - Demonstration of 25 W/cm³ class All SiC Three Phase Inverter

TAKAO Kazuto - TOSHIBA - JAPAN
SHINOHE Takashi - TOSHIBA - JAPAN

0685 - Development of a Boost Converter for PV Systems Based on SiC BJTs

HENSEL Andreas - FRAUNHOFER-INSTITUT FÜR SOLARE ENERGIESYSTEME ISE - GERMANY
KRANZER Dirk - FRAUNHOFER-INSTITUT FÜR SOLARE ENERGIESYSTEME ISE - GERMANY
WILHELM Christian - FRAUNHOFER-INSTITUT FÜR SOLARE ENERGIESYSTEME ISE - GERMANY

0785 - On Understanding and Driving SiC Power JFETs

BASU Supratim - BOSE RESEARCH P LTD - INDIA
UNDELAND Tore - NTNU, TRONDHEIM, NORWAY - NORWAY

0895 - First principle and Electrical Simulation with Characterization of GaN/4H-SiC Heterostructure Vertical PN Power Diode

BOSE Srikanta - UIC - UNITED STATES OF AMERICA
MAZUMDER Sudip K. - UIC - UNITED STATES OF AMERICA

14:10 **DS1h: Topic 6: Converter Control Sets and Modulation Strategies**

Location: Hall 3

Chair: Dr. Jorge DUARTE, TECHNICAL UNIVERSITY OF EINDHOVEN, NETHERLANDS
Co-Chair:

0013 - Gating Signal Generator for Multiphase Voltage Source Inverters Using Space Vector PWM

HU Jwu-Sheng - NATIONAL CHIAO TUNG UNIVERSITY - TAIWAN (China)
CHEN Keng yuan - NATIONAL CHIAO TUNG UNIVERSITY - TAIWAN (China)
TANG Chi-Him - NATIONAL CHIAO TUNG UNIVERSITY - TAIWAN (China)
SHEN Te-Yang - NATIONAL CHIAO TUNG UNIVERSITY - TAIWAN (China)

0022 - Space Vector Modulation Strategy applied to Interphase Transformers-based Five-Level Current Source Inverters for Electric Propulsion

DUPCZAK Bruno - INEP-UFSC - BRAZIL

HELDWEIN Marcelo - INEP-UFSC - BRAZIL

PERIN Arnaldo - INEP-UFSC - BRAZIL

0031 - Evolutive Discontinuous SVM for Variable Speed Electric Drive

KHAN Hamid - IFP ENERGIES NOUVELLES - FRANCE

TOUZANI Youssef - IFP ENERGIES NOUVELLES - FRANCE

DRISSI Khalil El Khamlichi - LASMEA - FRANCE

0093 - A New Unequal DC link Voltage Configuration for a Single Phase Multilevel Converter to Reduce Low Order Harmonics

GHASEMI Negareh - QUT - AUSTRALIA

ZARE Firuz - QUEENSLAND UNIVERSITY OF TECHNOLOGY - AUSTRALIA

LANGTON Christian - QUT - AUSTRALIA

GHOSH Arindam - QUT - AUSTRALIA

0123 - A Space Vector PWM Algorithm for a Three-Level Seven-Phase Voltage Source Inverter

LEVI Emil - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

DORDEVIC Obrad - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

JONES Martin - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

0177 - Generalized Integration Duty Cycle Conversion Pulse-Width Modulation (IPWM) Algorithm for Multilevel-PV DC-Link Inverter

ABDALLA Imadeddin - UNIVERSITY OF LEEDS - UNITED KINGDOM

ZHANG L. - UNIVERSITY OF LEEDS - UNITED KINGDOM

CORDA J. - UNIVERSITY OF LEEDS - UNITED KINGDOM

0194 - Analysis of Space Vector Modulation Techniques Applied in Voltage Source Converters of Ultrahigh Speed Induction Motor Drives

STUMPF Peter - BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS - HUNGARY

NAGY Istvan - BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS - HUNGARY

JARDAN Rafael Kalman - BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS - HUNGARY

VARGA Zoltan - BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS - HUNGARY

0391 - Parametric Study of Dead Time Effect on Three Phase AC Output Impedance of Voltage Source Inverter (VSI)

SHEN ZHIYU - VIRGINIA TECH - UNITED STATES OF AMERICA

JAKSIC Marko - VIRGINIA TECH - UNITED STATES OF AMERICA

AHMED Sara - VIRGINIA TECH - UNITED STATES OF AMERICA

MATTAVELLI Paolo - VIRGINIA TECH - UNITED STATES OF AMERICA

BOROYEVICH Dushan - VIRGINIA TECH - UNITED STATES OF AMERICA

0507 - The Application of the SHE-PWM Based on Particle Swarm Optimization for the Improvement of the Cascaded H-Bridges Inverter Output Voltage

KOUZOU Abdellah - DJELFA UNIVERSITY/TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

PETER Stolze - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

MAHMOUDI Mohaned Oulhadj - ENP - ALGERIA

BOUCHERIT Mohamed Seghir - ECOLE NATIONALE POLYTECHNIQUE, - ALGERIA

KENNEL Ralph - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

0547 - A PWM strategy dedicated to RMS current reduction in DC link capacitor of an embedded three phase inverter

NGUYEN Thê Dung - UNIVERSITÉ DE TECHNOLOGIE DE COMPIÈGNE - FRANCE
PATIN Nicolas - UNIVERSITÉ DE TECHNOLOGIE DE COMPIÈGNE - FRANCE
FRIEDRICH Guy - UNIVERSITÉ DE TECHNOLOGIE DE COMPIÈGNE - FRANCE

0734 - Space Vector Modulation Scheme to Minimize Common-Mode Voltage generated by a Three-Phase Hybrid Multilevel Inverter

JAPPE Tiago Kommers - FEDERAL UNIVERSITY OF SANTA CATARINA - BRAZIL
MUSSA Samir Ahmad - FEDERAL UNIVERSITY OF SANTA CATARINA - BRAZIL
HELDWEIN Marcelo Lobo - FEDERAL UNIVERSITY OF SANTA CATARINA - BRAZIL
CABALLERO Domingo Ruiz - PONTIFICIAL CATHOLIC UNIVERSITY OF VALPARAÍSO - CHILE
CASTILLO Antonio - PONTIFICIAL CATHOLIC UNIVERSITY OF VALPARAÍSO - CHILE

0772 - Control of the Modular Multi-Level Converter for Minimized Cell Capacitance

ENGEL Stefan P. - RWTH AACHEN UNIVERSITY - GERMANY
DE DONCKER Rik W. - RWTH AACHEN UNIVERSITY - GERMANY

0793 - Model Predictive Current Controller for Four-Leg Converters under Unbalanced Conditions

ZIANI Aziz Choubail - LAPLACE - FRANCE
LLOR Ana M. - LAPLACE - FRANCE
FADEL Maurice - LAPLACE - FRANCE

0920 - A CURRENT SYMMETRICAL HYBRID MULTILEVEL DC-AC CONVERTER

MUSSA Samir Ahmad - FEDERAL UNIVERSITY OF SANTA CATARINA - BRAZIL
JAPPE Tiago Kommers - FEDERAL UNIVERSITY OF SANTA CATARINA - BRAZIL
HELDWEIN Marcelo Lobo - FEDERAL UNIVERSITY OF SANTA CATARINA - BRAZIL
CABALLERO Domingo Ruiz - PONTIFICIAL CATHOLIC UNIVERSITY OF VALPARAÍSO - CHILE
PAREDES Carlos - PONTIFICIAL CATHOLIC UNIVERSITY OF VALPARAÍSO - CHILE

0921 - Power Conditioning System with Cascaded H-Bridge Multilevel Converter – DC-link Voltage Balancing Method

ZYGMANOWSKI Marcin - THE SILESIAN UNIVERSITY OF TECHNOLOGY - POLAND
GRZESIK Boguslaw - THE SILESIAN UNIVERSITY OF TECHNOLOGY - POLAND
MICHALAK Jaroslaw - THE SILESIAN UNIVERSITY OF TECHNOLOGY - POLAND

0941 - Space Vector Modulation Scheme for Six-Switch Two Three-Phase Output Inverter

HOSHI Nobukazu - TOKYO UNIVERSITY OF SCIENCE - JAPAN
OGAWA Tomohisa - TOKYO UNIVERSITY OF SCIENCE - JAPAN

14:10 **DS1i: Topic 7: Application of Control Methods to Electrical Systems**

Location: Hall 3

Chair: Ir. Cornelis PLET, IMPERIAL COLLEGE LONDON, UNITED KINGDOM
Co-Chair:

0020 - Comparative Evaluation of Fuzzy-PI and PI Control Methods for a Three Phase Grid Connected Inverter

TSENGENES Georgios - DEMOCRITUS UNIVERSITY OF THRACE - GREECE
ADAMIDIS Georgios - DEMOCRITUS UNIVERSITY OF THRACE - GREECE

0025 - Finite-Set Model Predictive Control of a Flying Capacitor Converter With Hysteresis Voltage Balancing

STOLZE Peter - TECHNISCHE UNIVERSITAET MUENCHEN - GERMANY
LANDSMANN Peter - TECHNISCHE UNIVERSITAET MUENCHEN - GERMANY
KENNEL Ralph - TECHNISCHE UNIVERSITAET MUENCHEN - GERMANY

MOUTON Hendrik du Toit - UNIVERSITY OF STELLENBOSCH - SOUTH AFRICA

0026 - Finite-Set Model Predictive Control with Heuristic Voltage Vector Preselection for Higher Prediction Horizons

STOLZE Peter - TECHNISCHE UNIVERSITAET MUENCHEN - GERMANY

LANDSMANN Peter - TECHNISCHE UNIVERSITAET MUENCHEN - GERMANY

KENNEL Ralph - TECHNISCHE UNIVERSITAET MUENCHEN - GERMANY

MOUTON Hendrik du Toit - UNIVERSITY OF STELLENBOSCH - SOUTH AFRICA

0142 - Sliding mode control, dynamic assessment and practical implementation of a bidirectional buck / boost dc to dc converter

GEE Anthony - UNIVERSITY OF BATH - UNITED KINGDOM

ROBINSON Francis - UNIVERSITY OF BATH - UNITED KINGDOM

DUNN Rod - UNIVERSITY OF BATH - UNITED KINGDOM

0167 - Research on the Z-source inverter grid-connected control of micro-grid based on differential geometry

YAN Chen - UNIVERSITY - CHINA

0263 - Sensor Fault-Tolerant Control of an Induction Motor Based Electric Vehicle

TABBACHE Bekheïra - UNIVERSITY OF BREST - FRANCE

BENBOUZID Mohamed - UNIVERSITY OF BREST - FRANCE

KHELOUI Abdelaziz - POLYTECHNIC MILITARY ACADEMY - ALGERIA

BOURGEOIS Jean-Matthieu - ENIB - FRANCE

0330 - Optimal control of voltage source converters for fault operation

BIANCHI Fernando - IREC - SPAIN

EGEA-ALVAREZ Agustí - CITCEA-UPC - SPAIN

JUNYENT-FERRÉ Adrià - CITCEA-UPC - SPAIN

GOMIS-BELLMUNT Oriol - IREC - CITCEA - SPAIN

0460 - An Improved Finite Control Set -Model Predictive Control (FCS-MPC) algorithm with Imposed Optimized Weighting Factor

DAVARI S. Alireza - TUM - GERMANY

ARAB KHABURI Davood - IUST - IRAN

STOLZE Peter - TUM - GERMANY

KENNEL Ralph - TUM - GERMANY

0623 - Design and Analysis of a Flatness-Based Control Approach for Speed Control of Drive Systems with Elastic Couplings and Uncertain Loads

THOMSEN Sönke - CHRISTIAN-ALBRECHT-UNIVERSITY OF KIEL - GERMANY

FUCHS Friedrich W. - CHRISTIAN-ALBRECHTS-UNIVERSITY OF KIEL - GERMANY

0780 - Open-loop Approach for Control of Multi-terminal DC systems based on Modular Multilevel Converters

HAIDER Arif - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

AHMED Noman - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

ANGQUIST Lennart - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

NEE Hans-Peter - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

0950 - Speed Estimation using ANFIS With The Adaptive Controller Of Magnetically Saturated Induction Motor

MOUSTAFA HASSAN Mohamed Ahmed - ELEC. POWER DEPT., CAIRO UNIVERSITY - EGYPT

ISMAIL Mohamed M. - HELWAN UNIVERSITY - EGYPT

14:10 **DS1j: Topic 12: Advanced Control**

Location: Hall 3

Chair: Dr. DOKI Shinji DOKI, NAGOYA UNIVERSITY, JAPAN
Co-Chair:

0437 - Sensorless Control of a Doubly Fed Induction Machine Based on an Extended Kalman Filter

SILVA Cesar - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

MALDONADO Eric - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

OLIVARES Manuel - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

0486 - Sensorless Control Method with Relatively Low Frequency Signal Injection for Low Acoustic Noise

JUNG Suk-Hwa - NAGOYA UNIVERSITY - JAPAN

DOKI Shinji - NAGOYA UNIVERSITY - JAPAN

OKUMA Shigeru - NAGOYA UNIVERSITY - JAPAN

FUJITSUNA Masami - DENSO CORPORATION - JAPAN

0523 - Position Estimation in a True Asymmetric Cascade H-Bridge Multilevel Inverter

SALEH Kamel - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

SUMNER Mark - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

0573 - Analysis of a deeply saturated sensorless PMSynRel drive for an automotive application

ZHAO Shuang - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

WALLMARK Oskar - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

LEKSELL Mats - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN

0582 - Sensorless position control for SPMSM at zero speed and acceleration

ABRY Frédéric - AMPERE LABORATORY, UNIVERSITE DE LYON - FRANCE

ZGORSKI Aloïs - SAGEM DEFENSE SECURITE - FRANCE

LIN-SHI Xuefang - AMPERE, UNIVERSITE DE LYON - FRANCE

RETIF Jean-Marie - AMPERE LABORATORY, UNIVERSITE DE LYON - FRANCE

0700 - A Simple yet Efficient Doubly-Fed Drive/Generator Controller

CHAAL Hamza - NORTHUMBRIA UNIVERSITY - UNITED KINGDOM

JOVANOVIC Milutin - NORTHUMBRIA UNIVERSITY - UNITED KINGDOM

ATKINSON Dave - NEWCASTLE UNIVERSITY - UNITED KINGDOM

CHEN WenJun - NEWCASTLE UNIVERSITY - UNITED KINGDOM

14:10 **DS1k: Topic 12: High Performance Drive Systems Issues**

Location: Hall 3

Chair: Prof. Gopakumar K, INDIAN INSTITUTE OF SCIENCE, INDIA
Co-Chair:

0034 - A High Speed Synchronous Drive with Very Sensitive Back-emf Based Indirect Sensors

ROD Christian - EPFL - SWITZERLAND

RUFER Alfred - EPFL - SWITZERLAND

0052 - Direct Torque Control Scheme of IM Drive using 12-sided Polygonal Voltage Space Vector

K Gopakumar - INDIAN INSTITUTE OF SCIENCE - INDIA

KAZMIERKOWSKI Marian - INSTITUTE OF CONTROL AND INDUSTRIAL ELECTRONICS - POLAND

PATEL Chintan - INDIAN INSTITUTE OF SCIENCE - INDIA

P.P Rajeevan - INDIAN INSTITUTE OF SCIENCE - INDIA

DEY Anubrata - INDIAN INSTITUTE OF SCIENCE - INDIA

0083 - Direct Thrust Control of Linear Induction Motor in Full Operation Range for Traction Application

WANG Ke - CHINESE ACADEMY OF SCIENCE - CHINA
SHI Liming - CHINESE ACADEMY OF SCIENCE - CHINA
LI Yaohua - CHINESE ACADEMY OF SCIENCE - CHINA
GE Qiongxuan - CHINESE ACADEMY OF SCIENCE - CHINA

0101 - Voltage Vector Selection Strategy for the Interior PMSM DTC system

GERLING Dieter - UNIVERSITY OF FEDERAL DEFENSE MUNICH - GERMANY
LI Yaohua - UNIVERSITY OF FEDERAL DEFENSE MUNICH - GERMANY

0127 - Modeling of the air film pressure for a haptic touch actuator

WINTER Christophe - EPFL-IMT-LAI - SWITZERLAND
PERRIARD Yves - EPFL-IMT-LAI - SWITZERLAND

0302 - Optimal direct torque control for PMSM based on model predictive control

HAGINO Michihisa - MIE UNIVERSITY - JAPAN
ZANMA Tadao - MIE UNIVERSITY - JAPAN
ISHIDA Muneaki - MIE UNIVERSITY - JAPAN

0316 - Improvements of Speed Adaptation Response for IPMSM Position Sensorless Vector Control With Parallel Feedforward Compensator

TANAKA Hajime - CHUBU UNIVERSITY - JAPAN
HASEGAWA Masaru - CHUBU UNIVERSITY - JAPAN

0553 - Sensorless torque control of PM motor using modified HF injection method for audible noise reduction

JIANG Hui - THE UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
SUMNER Mark - THE UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0684 - Hybrid sensorless control of Axial Flux Permanent Magnet motor drives, including zero speed

GIANGRANDE Paolo - POLITECNICO DI BARI - ITALY
RONCHETTO Davide - POLITECNICO DI TORINO - ITALY
PELLEGRINO Gianmario - POLITECNICO DI TORINO - ITALY
CUPERTINO Francesco - POLITECNICO DI BARI - ITALY
GERADA Christopher - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
SUMNER Mark - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0763 - Sensorless Control of Permanent Magnet Synchronous Motor Employing Extended Kalman Filter in Combination with HF Injection Method

VOSMIK David - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC
PEROUTKA Zdenek - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC

0904 - Neural Network Aided Unscented Kalman Filter for Sensorless Control of PMSM

TALLA Jakub - UNIVERSITY OF WEST BOHEMIA - CZECH REPUBLIC
PEROUTKA Zdenek - WEST BOHEMIA UNIVERSITY IN PILSEN - CZECH REPUBLIC

14:10 **DS11: Topic 20: Industry Specific Energy Conversion and Conditioning Technologies**

Location: Hall 3

Chair: Dr. Sergej KALASCHNIKOW, DANFOSS, UNITED STATES OF AMERICA
Co-Chair:

0163 - Numerical Modelling in Plate-Type Electrostatic Precipitator Supplied with Pulse Energization

POPA Gabriel Nicolae - POLITECHNICA UNIVERSITY TIMISOARA - ROMANIA
DINIS Corina Maria - POLITECHNICAUNIVERISTYTIMISOARA - ROMANIA
DEACONU Sorin Ioan - POLITECHNICAUNIVERSITYTIMISOARA - ROMANIA

0471 - A Robust Model Reference Adaptive Control Applied For Power Quality Conditioning Devices

KANIESKI Joao Marcos - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL
GRUNDLING Hilton Abilio - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

0750 - Powering Low Cost Utility Sensors Using Energy Harvesting

MOGHE Rohit - GEORGIA INSTITUTE OF TECHNOLOGY - UNITED STATES OF AMERICA
LAMBERT Frank - GEORGIA INSTITUTE OF TECHNOLOGY - UNITED STATES OF AMERICA
DIVAN Deepak - GEORGIA INSTITUTE OF TECHNOLOGY - UNITED STATES OF AMERICA

14:10 **DS1m: Topic 21: Energy conversion and conditioning technologies in physics research and related applications** *Location: Hall 3*
Chair: Prof. Dr. Marco RIVA, UNIVERSITÀ DEGLI STUDI DI MILANO, ITALY
Co-Chair:

0155 - POWER SUPPLIES FOR THE DIAGNOSTIC AND MAIN BEAM DUMPS OF FERMI@ELETTRA

VISINTINI Roberto - SINCROTRONE TRIESTE - ITALY
MASSARELLI Emanuele - EEI - ITALY
FACCIO Antonio - EEI - ITALY
SEGATO Michele - EEI - ITALY
HOHMANN Maik - TRANSTECHNIK GMBH & CO. KG - GERMANY
SCHUMANN Frank - TRANSTECHNIK GMBH & CO. KG - GERMANY

0225 - Improved Control Strategy for Active Bouncers used in Klystron Modulators

MAESTRI Sebastian - UNIVERSIDAD NACIONAL DE MAR DEL PLATA - ARGENTINA
GARCIA RETEGUI Rogelio - UNIVERSIDAD NACIONAL DE MAR DEL PLATA - ARGENTINA
MARIO Benedetti - UNIVERSIDAD NACIONAL DE MAR DEL PLATA - ARGENTINA
WASSINGER Nicolas - UNIVERSIDAD NACIONAL DE MAR DEL PLATA - ARGENTINA
AGUGLIA Davide - CERN-EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH - SWITZERLAND
NISBET David - CERN - SWITZERLAND

0458 - Power Distribution Architectures and Converters for High Energy Physics: Application to LHC Experiments

RIVA Marco - UNIVERSITÀ DEGLI STUDI DI MILANO - ITALY
BELLONI Federico - UNIVERSITÀ DEGLI STUDI DI MILANO - ITALY

0789 - A Capacitor Charging Power Supply for Repetitive Pulsed Power Systems

NAMI Alireza - KUAMOTO UNIVERSITY - JAPAN
SAKAMOTO Tatsurou - KUMAMOTO UNIVERSITY - JAPAN
AKIYAMA Hidenori - KUMAMOTO UNIVERSITY - JAPAN

14:10 **DS1n: Topic 22: Education in Electrical Engineering** *Location: Hall 3*
Chair: Prof. Philippe LE MOIGNE, ECOLE CENTRALE DE LILLE, FRANCE
Co-Chair:

0066 - Simulink-based Floating-Point DSP Control Platform

RUPP Benjamin - BERN UNIVERSITY OF APPLIED SCIENCES - SWITZERLAND
LOVATT Howard - CSIRO MATERIALS SCIENCE AND ENGINEERING - AUSTRALIA

VEZZINI Andrea - BERN UNIVERSITY OF APPLIED SCIENCES - SWITZERLAND

0146 - Development of a Real Time Monitoring and Control System for PLC Based Elevator

IRMAK Erdal - GAZI UNIVERSITY - TURKEY

COLAK Ilhami - GAZI UNIVERSITY - TURKEY

KAPLAN Orhan - GAZI UNIVERSITY - TURKEY

KOSE Ali - GAZI UNIVERSITY - TURKEY

0456 - Teaching Non Linear Systems: the Educational Approach of Power Electronics

RIVA Marco - UNIVERSITÀ DEGLI STUDI DI MILANO - ITALY

BELLONI Federico - UNIVERSITÀ DEGLI STUDI DI MILANO - ITALY

DELLAGIUSTINA Davide - UNIVERSITÀ DEGLI STUDI DI MILANO - ITALY

0551 - Using SPICE for Power System Simulations

CROSS Andrew - ASTON UNIVERSITY - UNITED KINGDOM

STRICKLAND Dani - ASTON UNIVERSITY - UNITED KINGDOM

0795 - Transferable skills and engineering practices – Case Analog Signal Processing

KUISMA Mikko - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

NIEMELÄ Hanna - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0827 - PVEClab: Interactive Power Electronics Training, Teaching and Experimentation Tool

LOPEZ Oswaldo - UNIVERSIDAD DE IBAGUE - COLOMBIA

RICO Andres - UNIVERSIDAD DE IBAGUE - COLOMBIA

0845 - Lighting systems: A Course for Increasing Power Electronics Attractiveness in Non-specialized Engineer School?

MARGUERON Xavier - ECOLE CENTRALE DE LILLE - L2EP - FRANCE

LE MOIGNE Philippe - ECOLE CENTRALE DE LILLE - L2EP - FRANCE

BRACIKOWSKI Nicolas - ECOLE CENTRALE DE LILLE - L2EP - FRANCE

0847 - LED Dimmer as Versatile Hardware Platform for Practical Exercises in Power Electronics and Control Courses

GALKINS Ilya - RIGA TECHNICAL UNIVERSITY - LATVIA

AVOTINS Ansis - RIGA TECHNICAL UNIVERSITY - LATVIA

SUZDALENKO Alexander - RIGA TECHNICAL UNIVERSITY - LATVIA

08:30 **Keynote 2: Power Electronics in the Automotive Industry**

Location: Hall 1

Chair: Prof. Phil MAWBY, UNIVERSITY OF WARWICK, UNITED KINGDOM

Co-Chair: Prof. Dr. Ir. Philippe LATAIRE, VRIJE UNIVERSITEIT BRUSSEL, BELGIUM

08:30 0959 - Toyota's Activities on Power Electronics for Future Mobility

HAMADA Kimimori - TOYOTA MOTOR CORPORATION - JAPAN

09:00 **Awards Ceremony**

Location: Hall 1

Chair: Prof. Dr. Marcel OLD_JUFER201107271751, EPFL, SWITZERLAND

Co-Chair: Prof. Dr. Ir. Jean-Luc THOMAS, CONSERVATOIRE NATIONAL DES ARTS ET METIERS, FRANCE

09:50 **LS4a: Industrial Session: Automotive**

Location: Hall 1

Chair: Prof. Phil MAWBY, UNIVERSITY OF WARWICK, UNITED KINGDOM
Co-Chair: Prof. Alain BOUSCAYROL, UNIVERSITY LILLE1, FRANCE

09:50 **0960 - Requirements, Challenges and Trends in Power Electronics for Hybrid and Electric Road Vehicles**

REEVE John - RICARDO UK LTD - UNITED KINGDOM

10:10 **0963 - Drivetrain architectures and their impact on the choice of the electrical machine**

MATHOY Arno - BRUSA ELEKTRONIK AG - SWITZERLAND

10:30 **0961 - Advanced Drive Systems for Automotive Electric Power Steering**

SZABO Adrian - TRW AUTOMOTIVE - UNITED KINGDOM

09:50 **LS4b: Topic 15: Converter Topologies for Renewable Energy Sources**

Location: Hall 11a

Chair: Prof. Dr. Friedrich Wilhelm FUCHS, CHRISTIAN-ALBRECHTS-UNIVERSITY OF KIEL, GERMANY
Co-Chair: Michael SOKOLOV, IMPERIAL COLLEGE LONDON, UNITED KINGDOM

09:50 **0323 - Comparison of 3 Self-Starting Step-Up DC:DC Converter Topologies for Harvesting Energy from Low-Voltage and Low-Power Microbial Fuel Cells**

DEGRENE Nicolas - AMPERE LAB - FRANCE

ALLARD Bruno - AMPERE LAB - FRANCE

BURET Francois - AMPERE LAB - FRANCE

MOREL Florent - AMPERE LAB - FRANCE

10:10 **0361 - Interleaved High Step-Up Converter with Built-In Transformer and Voltage Doubler for PV Grid-connected Generation Systems**

LI Weichen - ZHEJIANG UNIVERSITY - CHINA

LI Wuhua - ZHEJIANG UNIVERSITY - CHINA

CUI Wenfeng - ZHEJIANG UNIVERSITY - CHINA

ZHAO Yi - ZHEJIANG UNIVERSITY - CHINA

YANG Bo - ZHEJIANG UNIVERSITY - CHINA

HE Xiangning - ZHEJIANG UNIVERSITY - CHINA

10:30 **0095 - Dynamic Properties of PCM-Controlled Current-Fed Boost Converter in Photovoltaic System Interfacing**

LEPPAAHO Jari - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

SUNTIO Teuvo - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

09:50 **LS4c: Topic 1 - New Silicon Devices and Gate Drive Methods**

Location: Hall 9

Chair: Leo LORENZ, INFINEON TECHNOLOGIES AG, GERMANY
Co-Chair: Prof. Dr. Ir. Jean-Luc SCHANEN, G2ELAB, FRANCE

09:50 **0040 - A New Power MOSFET Generation designed for Synchronous Rectification**

SIEMIENIEC Ralf - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

MOESSLACHER Christian - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

BLANK Oliver - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

ROESCH Maximilian - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

FRANK Michaela - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

HUTZLER Michael - INFINEON TECHNOLOGIES AUSTRIA AG - AUSTRIA

10:10 **0660 - Advanced Three-Level Converter with Newly developed 1200V Reverse Blocking IGBTs**

IGARASHI Seiki - FUJI ELECTRIC SYSTEMS CO., LTD. - JAPAN

MYASHITA Syuuji - FUJI ELECTRIC SYSTEMS CO.LTD - JAPAN

WAKIMOTO Hiroki - EUJI ELECTRIC HOLDING CO.LTD - JAPAN

NAKAZAWA Haruo - FUJI ELECTRIC HOLDING CO.LTD - JAPAN

OKUMA Yasuhiro - FUJI ELECTRIC HOLDING CO.LTD - JAPAN

10:30 **0506 - Effects of Varying Load Conditions on Adaptive Gate Control Methods**

ROSE Matthias - DMOS GMBH - GERMANY

KRUPAR Joerg - DMOS GMBH - GERMANY

GUELDNER Henry - TU DRESDEN - GERMANY

BRENNER Eberhard - UNIVERSITY OF APPLIED SCIENCES DRESDEN - GERMANY

09:50 **LS4d: Topic 16: Converter Control in FACTS Applications**

Location: Hall 10b

Chair: Dr. Benoît ROBYNS, HEI, FRANCE

Co-Chair: Prof. Jon CLARE, NOTTINGHAM UNIVERSITY, UNITED KINGDOM

09:50 **0432 - FREQUENCY SWITCHING ANALYSIS OF AN iUPQC WITH HARDWARE IN-THE-LOOP DEVELOPMENT TOOL**

FRANÇA Bruno - CEFET - RJ - BRAZIL

AREDES Mauricio - COPPE/UFRJ - BRAZIL

ROLIM Luis Guilherme - COPPE/UFRJ - BRAZIL

10:10 **0240 - Critical Evaluation of FBD, PQ and Generalized Non-Active Power Theories**

XU Fan - UNIVERSITY OF TENNESSEE - UNITED STATES OF AMERICA

TOLBERT Leon - UNIVERSITY OF TENNESSEE - UNITED STATES OF AMERICA

XU Yan - OAK RIDGE NATIONAL LABORATORY - UNITED STATES OF AMERICA

10:30 **0691 - A review on synchronization methods for grid-connected three-phase voltage-source converters under unbalanced and distorted grid conditions**

BOYRA Maiaelen - SUPELEC - FRANCE

THOMAS Jean-Luc - CNAM - FRANCE

09:50 **LS4e: Topic 5: Matrix converters**

Location: Hall 6

Chair: Dr. Jyoti SASTRY, ABB INC, UNITED STATES OF AMERICA

Co-Chair: Prof. Dr. Mark BAKRAN, UNIVERSITY BAYREUTH, GERMANY

09:50 **0736 - Resonant Controllers for the Control of 4-Leg Matrix Converters**

CARDENAS Roberto - UNIVERSITY OF SANTIAGO DE CHILE - CHILE

JURI Carlos - UNIVERSITY OF CHILE - CHILE

PEÑA Ruben - UNIVERSITY OF CONCEPCION - CHILE

CLARE Jon - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

WHEELER Patrick - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

10:10 **0899 - A High Power Density SiC-JFet-based Matrix Converter**

DE LILLO Liliana - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

EMPRINGHAM Lee - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

SCHULZ Martin - INFINEON TECHNOLOGIES AG - GERMANY

WHEELER Pat - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

10:30 **0953 - DC circulating Current for Capacitor Voltage Balancing in Modular Multilevel Matrix Converter**

OATES Colin - ALSTOM GRID - UNITED KINGDOM

MONDAL Gopal - ALSTOM GRID - UNITED KINGDOM

09:50 **LS4f: Topic 17: Electronic Ballast and Solid State Lighting**

Location: Hall 10a

Chair: Ir. Ulrich BOEKE, PHILIPS RESEARCH LABORATORIES, NETHERLANDS
Co-Chair: Prof. Dr. Tomoki YOKOYAMA, TOKYO DENKI UNIVERSITY, JAPAN

09:50 **0200 - Primary-Controlled High-PF Flyback Converters Deliver Constant Dc Output Current**

ADRAGNA Claudio - STMICROELECTRONICS - ITALY

10:10 **0490 - Preliminary investigations of piezoelectric based LED luminary**

NIELSEN Dennis - TECHNICAL UNIVERSITY OF DENMARK - DENMARK

ANDERSEN Michael A. E. - TECHNICAL UNIVERSITY OF DENMARK - DENMARK

SINDING MEYER Kaspar - NOLIAC A/S - DENMARK

10:30 **0533 - Achieving Higher Power Density in DC-DC Converters through Current Ripple Increase**

SCARPA Vladimir - KDEE - GERMANY

ARAUJO Samuel - KDEE - GERMANY

SAHAN Benjamin - KDEE - GERMANY

ZACHARIAS Peter - KDEE - GERMANY

09:50 **LS4g: Topic 10: Control Optimisation of Permanent Magnet Synchronous Machines**

Location: Hall 11b

Chair: Prof. Dr. Uwe SCHAEFER, TU BERLIN, GERMANY
Co-Chair: Dr. Mark SUMNER, NOTTINGHAM UNIVERSITY, UNITED KINGDOM

09:50 **0015 - Sensorless Control Drive of Permanent Magnet Motor Based on a Simple On-line Parameter Identification Scheme**

MOUSSA Mona - ARAB ACADEMY FOR SCIENCE AND TECHNOLOGY - EGYPT

DESSOUKY Yasser - ARAB ACADEMY FOR SCIENCE AND TECHNOLOGY - EGYPT

10:10 **0484 - Current Ripple Reduction in Synchronous Machines driven from Multi-Functional Converter Systems**

HACKNER Thomas - UNIVERSITY OF APPLIED SCIENCES - GERMANY

PFORR Johannes - UNIVERSITY OF APPLIED SCIENCES - GERMANY

10:30 **0113 - Manufacturing tolerances: Estimation and prediction of cogging torque influenced by magnetization faults**

COENEN Isabel - RWTH AACHEN UNIVERSITY - GERMANY

VAN DER GIET Michael - RWTH AACHEN UNIVERSITY - GERMANY

HAMEYER Kay - RWTH AACHEN UNIVERSITY - GERMANY

11:10 **LS5a: Industrial Session: Automotive Industry**

Location: Hall 1

Chair: Prof. Phil MAWBY, UNIVERSITY OF WARWICK, UNITED KINGDOM
Co-Chair: Kimimori HAMADA, TOYOTA MOTOR CORPORATION, JAPAN

11:10 **0962 - Power Electronics Challenges for E-Mobility**

PLIKAT Robert - VOLKSWAGEN AG - GERMANY

11:30 **0976 - Power Management Systems for Electric and Hybrid Vehicles**

TIBBLES Peter - PRODRIVE - UNITED KINGDOM

11:50 **0964 - EMC Challenges in Electric Vehicles**

HOENE Eckart - FRAUNHOFER IZM - GERMANY

11:10 **LS5b: Topic 15: Integration of PV sources in the Grid**

Location: Hall 11a

Chair: Prof. Dr. Axel MERTENS, LEIBNIZ UNIVERSITAET HANNOVER, GERMANY
Co-Chair: Dr. Malabika BASU, DIT, IRELAND

11:10 **0353 - Necessity and possibility of smart grid technology application on railway power supply system**

HAYASHIYA Hitoshi - EAST JAPAN RAILWAY COMPANY - JAPAN
FURUKAWA Takayuki - EAST JAPAN RAILWAY COMPANY - JAPAN
YOSHIZUMI Hiroshi - EAST JAPAN RAILWAY COMPANY - JAPAN
KONDO Takatoshi - EAST JAPAN RAILWAY COMPANY - JAPAN
KITANO Masayuki - EAST JAPAN RAILWAY COMPANY - JAPAN
AOKI Takashi - EAST JAPAN RAILWAY COMPANY - JAPAN
SUZUJI Takashi - JR EAST - JAPAN

11:30 **0760 - Fault Ride Through Capability for Solar Inverters**

FUJII Kansuke - FUJI ELECTRIC CO., LTD. - JAPAN
KANAOK Norikazu - HOKURIKU ELECTRIC POWER COMPANY - JAPAN
YAMADA Toshiya - FUJI ELECTRIC CO., LTD. - JAPAN
OKUMA Yasuhiro - FUJI ELECTRIC CO.LTD - JAPAN

11:50 **0605 - Energy Efficiency Analysis of Grid-Connected PV Inverter with Storage Battery**

NGE Chee Lim - UNIVERSITY OF AGDER - NORWAY
MIDTGÅRD Ole-Morten - UNIVERSITY OF AGDER - NORWAY
NORUM Lars - NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY - NORWAY

11:10 **LS5c: Topic 2: Cooling, Thermal Design, Thermal Management**

Location: Hall 9

Chair: Prof. Dr. Braham FERREIRA, DELFT UNIVERSITY OF TECHNOLOGY, NETHERLANDS
Co-Chair: Dr. Uwe SCHEUERMANN, SEMIKRON ELEKTRONIK GMBH & CO. KG, GERMANY

11:10 **0051 - Study of thermal interfaces aging for power electronics applications**

OUSTEN Jean-Pierre - INRETS - FRANCE
KHATIR Zoubir - INRETS - FRANCE

11:30 **0180 - Assessment of Power Electronic Inverter Cooling Requirements for a Rear-Axle Drive**

OTTOSSON Jonas - HALDEX & LUND UNIVERSITY - SWEDEN
KARLSSON Per - EMOTRON AB - SWEDEN

11:50 **0862 - Thermal modeling of the module integrated DC-DC converter for flexible thin-film PV modules**

ACANSKI Milos - TU DELFT - NETHERLANDS
FERREIRA Braham - TU DELFT - NETHERLANDS
POPOVIC-GERBER Jelena - TU DELFT - NETHERLANDS

11:10 **LS5d: Topic 6: Converter Control, Current/Voltage Control (III)**

Location: Hall 10b

Chair: Dr. Alex RUDERMAN, ELMO MOTION CONTROL LTD, ISRAEL
Co-Chair: Dr. Lee EMPRINGHAM, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM

11:10 **0227 - High-precision Current Control through Opposed Current Converters**

SCHELLEKENS Jan - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS
DUARTE Jorge - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS
HUISMAN Henk - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS
HENDRIX Marcel - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS

11:30 **0469 - Decentralized Active Gate Control for Current Balancing of Parallel Connected IGBT Modules**

LOBSIGER Yanick - POWER ELECTRONIC SYSTEMS LABORATORY - SWITZERLAND
BORTIS Dominik - POWER ELECTRONIC SYSTEMS LABORATORY - SWITZERLAND
KOLAR Johann - POWER ELECTRONIC SYSTEMS LABORATORY - SWITZERLAND

11:50 0783 - New junction temperature balancing method for a Three-Level Active NPC Converter

HAUK Erika - TECHNISCHE UNIVERSITÄT DRESDEN - GERMANY

ANDLER Daniel - TECHNISCHE UNIVERSITÄT DRESDEN - GERMANY

ALVAREZ Rodrigo - TECHNISCHE UNIVERSITÄT DRESDEN - GERMANY

BERNET Steffen - TECHNISCHE UNIVERSITÄT DRESDEN - GERMANY

11:10 **LS5e: Topic 5: Emerging Topologies**

Location: Hall 6

Chair: Prof. Dr. Guenter SCHROEDER, UNIVERSITY OF SIEGEN, GERMANY

Co-Chair: Prof. Dr. Ir. Maria PIETRZAK-DAVID, LAPLACE, UNIVERSITY OF TOULOUSE, FRANCE

11:10 0267 - P+Resonant Control of a Z-Source Inverter for Mains Voltage Drop Compensation

VON ZIMMERMANN Moritz - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

KELLNER Sven Ludwig - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

PIEPENBREIER Bernhard - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

11:30 0831 - Dynamic Capacitor – VAR and Harmonic Compensation without Inverters

PRASAI Anish - GEORGIA INSTITUTE OF TECHNOLOGY - UNITED STATES OF AMERICA

DIVAN Deepak - GEORGIA INSTITUTE OF TECHNOLOGY - UNITED STATES OF AMERICA

11:50 0820 - Preliminary hardware implementation of a six-phase quad-inverter induction motor drive

GRANDI Gabriele - UNIVERSITY OF BOLOGNA - ITALY

SANJEEVIKUMAR Padmanaban - UNIVERSITY OF BOLOGNA - ITALY

CASADEI Domenico - UNIVERSITY OF BOLOGNA - ITALY

11:10 **LS5f: Topic 8: Estimation Techniques**

Location: Hall 10a

Chair: Prof. Dr. Helmut WEISS, UNIVERSITY OF LEOBEN, AUSTRIA

Co-Chair: Dr. Ville SARKIMAKI, ABB AB, CORPORATE RESEARCH, SWEDEN

11:10 0097 - SENSORLESS FLOW RATE ESTIMATION IN FREQUENCY-CONVERTER-DRIVEN FANS

TAMMINEN Jussi - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

AHONEN Tero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

AHOLA Jero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

KESTILÄ Juha - ABB OY - FINLAND

11:30 0207 - Laboratory evaluation of the VSD-based hybrid estimation method for the pump operational state

AHONEN Tero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

TAMMINEN Jussi - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

AHOLA Jero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

KESTILÄ Juha - ABB OY - FINLAND

11:50 0407 - Online STATCOM Load Estimation using Inverter Synchronized Sampler and Recursive Least-Squares

HOFF Bjarte - NARVIK UNIVERSITY COLLEGE - NORWAY

SULKOWSKI Waldemar - NARVIK UNIVERSITY COLLEGE - NORWAY

OSTREM Trond - NARVIK UNIVERSITY COLLEGE - NORWAY

11:10 **LS5g: Topic 11: Fault Tolerant Drives**

Location: Hall 11b

Chair: Prof. Mario CACCIATO, DIEEI - UNIVERSITY OF CATANIA, ITALY

Co-Chair: Prof. Olorunfemi OJO, TENNESSEE TECH. UNIVERSITY, UNITED STATES OF AMERICA

11:10 0223 - A Fault-Tolerant Permanent Magnet Synchronous Motor Drive with Integrated Voltage Source Inverter Open-Circuit Faults Diagnosis

ESTIMA Jorge - UNIVERSITY OF COIMBRA/IT - PORTUGAL

MARQUES CARDOSO A. J. - UNIVERSITY OF COIMBRA/IT - PORTUGAL

11:30 **0677 - Performance Analysis of Active Damped Small DC Link Capacitor Based Drive for Unbalanced Input Voltage Supply**

MAHESHWARI Ramkrishan - AALBORG UNIVERSITY - DENMARK

MUNK-NIELSEN Stig - AALBORG UNIVERSITY - DENMARK

11:50 **0749 - A Fault Tolerant Drive for High Speed PM Machines**

WOLMARANS Johan - TU DELFT - NETHERLANDS

POLINDER Henk - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

FERREIRA Bram - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

12:20 **LS6a: Topic 18: Energy Management in Road Vehicles**

Location: Hall 1

Chair: Prof. Dr. Ir. Joeri VAN MIERLO, VRIJE UNIVERSITEIT BRUSSEL, BELGIUM
Co-Chair: Prof. Alain BOUSCAYROL, UNIVERSITY LILLE1, FRANCE

12:20 **0073 - Multiport Converter for Fast Charging of Electrical Vehicle Battery**

WALTRICH Gierry - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS

DUARTE Jorge L. - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS

HENDRIX Marcel A.M. - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS

12:40 **0583 - Accurate sizing of supercapacitor storage system considering its capacitance variation**

TRIESTE Sony - IREENA - FRANCE

BOURGUET Salvy - IREENA - FRANCE

OLIVIER Jean-Christophe - IREENA - FRANCE

LORON Luc - IREENA - FRANCE

LE CLAIRE Jean-Claude - IREENA - FRANCE

13:00 **0858 - Performances regeneration of supercapacitors during accelerated ageing tests in power cycling**

CHAARI Ramzi - LABORATOIRE IMS - FRANCE

EDDAHECH Akram - LABORATOIRE IMS - FRANCE

BRIAT Olivier - LABORATOIRE IMS - FRANCE

BERTRAND Nicolas - LABORATOIRE IMS - FRANCE

DELETAGE Jean-Yves - LABORATOIRE IMS - FRANCE

VINASSA Jean-Michel - LABORATOIRE IMS - FRANCE

12:20 **LS6b: Topic 15: Converter Control for Renewable Energy Sources**

Location: Hall 11a

Chair: Dr. Fabio CARASTRO, GE GLOBAL RESEARCH, GERMANY
Co-Chair: Dr. Ir. Yonghua CHENG, VITO -FLEMISH INSTITUTE FOR TECHNOLOGICAL RESEARCH, BELGIUM

12:20 **0045 - CURRENT-FED QUADRATIC FULL-BRIDGE BUCK CONVERTER FOR PV SYSTEMS INTERFACING: STATIC OPERATION**

HUUSARI Juha - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

SUNTIO Teuvo - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

12:40 **0047 - Small-signal Model of Photovoltaic Power Converter for Selection of Perturb and Observe Algorithm Step Time**

SOKOLOV Michael - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

GREEN Tim C. - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

MITCHESON Paul D. - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

SHMILOVITZ Doron - TEL-AVIV UNIVERSITY - ISRAEL

13:00 0584 - Capacitor Voltage Balance Limits in a Multilevel-Converter-Based Energy Storage System

BURUSTETA Sendoa - TECNALIA-ENERGY - SPAIN

POU Josep - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

CEBALLOS Salvador - TECNALIA-ENERGY - SPAIN

MARINO Iker - TECNALIA-ENERGY - SPAIN

ALZOLA José Ángel - TECNALIA-ENERGY - SPAIN

12:20 **LS6c: Topic 2: Passive Components, System Integration & Packaging**

Location: Hall 9

Chair: Dr. Martin FASCHING, MFTEC, AUSTRIA

Co-Chair: Ing. Milos ACANSKI, TU DELFT, NETHERLANDS

12:20 0645 - Adaptive cooling of power modules for reduced power and thermal cycling

CHOY Wei Juin - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

CASTELLAZZI Alberto - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

ZANCHETTA Pericle - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

12:40 0109 - High-Temperature Die-Attaches for SiC Power Devices

MASSON Amandine - LABORATOIRE AMPERE - FRANCE

BUTTAY Cyril - LABORATOIRE AMPERE - FRANCE

MOREL Herve - LABORATOIRE AMPERE - FRANCE

RAYNAUD Christophe - LABORATOIRE AMPERE - FRANCE

HASCOET Stanislas - LABORATOIRE AMPERE - FRANCE

GREMILLARD Laurent - MATEIS - FRANCE

13:00 0054 - Integrated Current Balancing Transformer for Primary Parallel Isolated Boost Converter

SEN Gokhan - TECHNICAL UNIVERSITY OF DENMARK - DENMARK

OUYANG Ziwei - TECHNICAL UNIVERSITY OF DENMARK - DENMARK

ANDERSEN Michael A. E. - TECHNICAL UNIVERSITY OF DENMARK - DENMARK

THOMSEN Ole C. - TECHNICAL UNIVERSITY OF DENMARK - DENMARK

MOLLER Lars - H2 LOGIC A/S - DENMARK

12:20 **LS6d: Topic 7: Application of Control Methods to Electrical Systems**

Location: Hall 10b

Chair: Prof. Hans-Peter NEE, KTH ROYAL INSTITUTE OF TECHNOLOGY, SWEDEN

Co-Chair: Anthony GEE, UNIVERSITY OF BATH, UNITED KINGDOM

12:20 0343 - A Method of Voltage Limiting and Distortion Avoidance for Islanded Inverter-Fed Networks under Fault

PLET Cornelis - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

GREEN Tim - IMPERIAL COLLEGE LONDON - UNITED KINGDOM

12:40 0274 - Straightforward Current Control - One Step Controller based on Current Slope Detection

BECKER Frank - KARLSRUHER INSTITUT FUER TECHNOLOGIE - GERMANY

ENNADIFI Hassan - KARLSRUHER INSTITUT FUER TECHNOLOGIE - GERMANY

BRAUN Michael - KARLSRUHER INSTITUT FUER TECHNOLOGIE - GERMANY

13:00 0762 - Frequency / Duty Cycle Current-Mode Fuzzy Control for LCC Resonant Converter

HU Manli - PADERBORN UNIVERSITY - GERMANY

BOECKER Joachim - PADERBORN UNIVERSITY - GERMANY

FROEHLEKE Norbert - PADERBORN UNIVERSITY - GERMANY

12:20 **LS6e: Topic 5: Failure Tolerant Systems or Converters**

Location: Hall 6

Chair: Prof. Dr. Rik DE DONCKER, RWTH AACHEN UNIVERSITY, GERMANY
Co-Chair: Prof. Mario MARCHESONI, UNIVERSITY OF GENOVA, ITALY

12:20 **0527 - Failure Tolerant Operation and Trimming Principle of the CLIC Main Linac**

SIEMASZKO Daniel - CERN - SWITZERLAND

PITTET Serge - CERN - SWITZERLAND

12:40 **0617 - Fault tolerant operation of power converters with cascaded cells**

DIJKHUIZEN Frans - ABB CORPORATE RESEARCH - SWEDEN

NORRGA Staffan - ABB CORPORATE RESEARCH - SWEDEN

13:00 **0816 - DESIGN OF A 12-PULSE CYCLOCONVERTER WITH FAULT-TOLERANCE CAPABILITY**

GUERRERO Victor - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

PONTT Jorge - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

12:20 **LS6f: Topic 8: Sensors and Transducers, Measurements Methods and Techniques**

Location: Hall 10a

Chair: Prof. Jero AHOLA, LAPPEENRANTA UNIVERSITY OF TECHNOLOGY, FINLAND
Co-Chair: Ing. Alexander PAWELLEK, UNIVERSITY ERLANGEN, GERMANY

12:20 **0209 - New evaluation of low frequency capture for a wide bandwidth clamping current probe for +/- 800 A using GMR sensors**

HUDOFFSKY Boris - UNIVERSITÄT STUTTGART - GERMANY

ROTH-STIELOW Jörg - UNIVERSITÄT STUTTGART - GERMANY

12:40 **0900 - Analog-to-Digital Converter for Input Voltage Measurement in Low-Power Digitally Controlled Switch-Mode Power Supply Converters**

RADIC Aleksandar - UNIVERSITY OF TORONTO - CANADA

AHSANUZZAMAN S M - UNIVERSITY OF TORONTO - CANADA

PARAYANDEH Amir - UNIVERSITY OF TORONTO - CANADA

PRODIC Aleksandar - UNIVERSITY OF TORONTO - CANADA

13:00 **0647 - Numerical Simulation and Experimental Validation of a Transmission Line Fault Location and Identification Method in the presence of Noise**

HEALY Caroline - CORK INSTITUTE OF TECHNOLOGY - IRELAND

GUINEE Richard - CORK INSTITUTE OF TECHNOLOGY - IRELAND

12:20 **LS6g: Topic 11: Developments in AC drives**

Location: Hall 11b

Chair: Prof. Emil LEVI, LIVERPOOL JOHN MOORES UNIVERSITY, UNITED KINGDOM
Co-Chair: Prof. Dr. Zdenek CEROVSKY, CZECH TECHNICAL UNIVERSITY IN PRAGUE, CZECH REPUBLIC

12:20 **0100 - Concept of low-voltage AC drive based on double-side cooled IGBT press-pack modules**

KICIN Slavo - ABB CORPORATE RESEARCH - SWITZERLAND

LAITINEN Matti - ABB OY - FINLAND

HAEDERLI Christoph - ABB CORPORATE RESEARCH - SWITZERLAND

SIKANEN Jukka - ABB OY - FINLAND

GRINBERG Roman - ABB CORPORATE RESEARCH - SWITZERLAND

FABIAN Jan-Henning - ABB CORPORATE RESEARCH - SWITZERLAND

HAMIDI Amina - ABB CORPORATE RESEARCH - SWITZERLAND

12:40 **0221 - High efficiency drive system with 3-level T-type inverter**

SCHWEIZER Mario - ETH ZURICH - SWITZERLAND

KOLAR Johann W. - ETH ZURICH - SWITZERLAND

13:00 **0730 - A Dual High-Speed PMSM Motor Drive Emulator with Finite Element Analysis on FPGA chip with Full Fault Testing Capability**

INABA Yasuhiro - DENSO - JAPAN

CENSE Sébastien - OPAL-RT TECHNOLOGIES - CANADA

OULD BACHIR Tarek - ECOLE POLYTECHNIQUE DE MONTRÉAL - CANADA

YAMASHITA Hirofumi - DENSO - JAPAN

DUFOUR Christian - OPAL-RT TECHNOLOGIES - CANADA

14:10 **DS2a: Topic 18: Electrical Systems in Road Vehicles**

Location: Hall 3

Chair: Dr. Duarte SOUSA, INSTITUTO SUPERIOR TECNICO - TU LISBON, PORTUGAL

Co-Chair:

0084 - Stability in Automotive Power Nets: Definitions, Algorithms and Experimental Validation

KLOETZL Johannes - FEAAM GMBH - GERMANY

GERLING Dieter - UNIVERSITY OF FEDERAL DEFENSE MUNICH - GERMANY

0110 - Route-Dependent Power-Adapted Operation Strategies in Range Extender Hybrid Vehicles

RICHTER Michael - UNIVERSITY OF ULM - GERMANY

WALTER Stefan - UNIVERSITY OF ULM - GERMANY

STIEGELER Markus - UNIVERSITY OF ULM - GERMANY

MENDES Marijo - UNIVERSITY OF ULM - GERMANY

KABZA Herbert - UNIVERSITIY OF ULM - GERMANY

0111 - Energy Management for Range Enlargement of a Hybrid Battery Vehicle with Battery and Double Layer Capacitors

RICHTER Michael - UNIVERSITY OF ULM - GERMANY

ZINSER Sebastian - UNIVERSITY OF ULM - GERMANY

STIEGELER Markus - UNIVERSITY OF ULM - GERMANY

MENDES Marijo - UNIVERSITY OF ULM - GERMANY

KABZA Herbert - UNIVERSITY OF ULM - GERMANY

0151 - Chances and limits of a thermal control for a three-phase voltage-source inverter in traction applications using permanent magnet synchronous or induction machines

WECKERT Marco - UNIEVRSITÄT STUTTGART - GERMANY

ROTH-STIELOW Jörg - UNIVERSITÄT STUTTGART - GERMANY

0445 - Analysis of an inductive charging system for a commercial electric vehicle

SOUSA Duarte - INSTITUTO SUPERIOR TECNICO - TU LISBON - PORTUGAL

NEVES André - INSTITUTO SUPERIOR TECNICO - TU LISBON - PORTUGAL

TERRAS José - INSTITUTO SUPERIOR TECNICO - TU LISBON - PORTUGAL

ROQUE António - EST SETUBAL - PORTUGAL

0578 - Design of a Power Management for a Battery Buffer System in an Electric Lift Truck by Means of Fuzzy Control and Genetic Algorithm

SCHROEDER Jens C. - UNIVERSITY OF KIEL - GERMANY

FUCHS Friedrich W. - UNIVERSITY OF KIEL - GERMANY

0636 - Development of an Optimized Power Section for a 5 kW Low Voltage Traction Inverter

MUEHLFELD Ole - UNIVERSITY OF KIEL - GERMANY

WITTIG Bjoern - UNIVERSITY OF KIEL - GERMANY
FUCHS Friedrich W. - UNIVERSITY OF KIEL - GERMANY

0649 - Analysis and Comparison of Performance Evaluation Methods of Battery Electric Vehicles

CHEN Yong - BEIJING INFORMATION SCIENCE & TECHNOLOGY UNIVERSITI - CHINA
WANG Zhenpo - BEIJING INSTITUTE OF TECHNOLOGY - CHINA

0662 - EMC and Safety in Vehicle Drives

DI NAPOLI Augusto - UNIVERSITÀ ROMA TRE - ITALY
ARTAN Ndokaj - UNIVERSITY OF ROMA TRE - ITALY

0743 - Evaluating the Zero-Sequence Inductance Ratio for Electrical Machines

DE SOUSA Luis - VALEO ENGINE & ELECTRICAL SYSTEMS - FRANCE
DOGAN Hussein - G2ELAB - FRANCE

0788 - Efficiency Optimization of a 30KW Interleaved 4-channels DC/DC Converter with variable number of active channels

AL SAKKA Monzer - VRIJE UNIVERSITEIT BRUSSEL - BELGIUM
VAN MIERLO Joeri - VRIJE UNIVERSITEIT BRUSSEL - BELGIUM
GUALOUS Hamid - UNIVERSITÉ DE CAEN BASSE NORMANDIE - FRANCE

0802 - A MATLAB Simulink Model for Toyota Prius 2004 based on DOE reports

NASIRI Hiva - K. N. TOOSI UNIERSITY OF TECHNOLOGY - IRAN
RADAN Ahmad - K. N. TOOSI UNIERSITY OF TECHNOLOGY - IRAN
PARIZADE Maziar - K. N. TOOSI UNIERSITY OF TECHNOLOGY - IRAN
GHAYEBLOO Abbas - K. N. TOOSI UNIERSITY OF TECHNOLOGY - IRAN

0814 - A SEPIC LED Driver with a Hybrid Dimming Technique for Road Vehicles

HSIEH Yuan-Ta - NATIONAL CHENG KUNG UNIVERSITY - TAIWAN (China)
LIU Bin-Da - NATIONAL CHENG KUNG UNIVERSITY - TAIWAN (China)
WU Jian-Fu - NATIONAL CHIP IMPLEMENTATION CENTER - TAIWAN (China)
FANG Chiao-Li - NATIONAL CHIP IMPLEMENTATION CENTER - TAIWAN (China)
TSAI Hann-Huei - NATIONAL CHIP IMPLEMENTATION CENTER - TAIWAN (China)
JUANG Ying-Zong - NATIONAL CHIP IMPLEMENTATION CENTER - TAIWAN (China)

0956 - Analysis, Control and Comparison of DC/DC Boost Converter Topologies for Fuel Cell Hybrid Electric Vehicle Applications

HEGAZY Omar - VRIJE UNIVERSITEIT BRUSSEL (VUB) - BELGIUM
VAN MIERLO Joeri - VRIJE UNIVERSITEIT BRUSSEL (VUB) - BELGIUM
LATAIRE Philippe - VRIJE UNIVERSITEIT BRUSSEL (VUB) - BELGIUM

14:10 **DS2b: Topic 18: Electrical Systems in Road Vehicles: Modelling, Simulation and Design Methods, Reliability Issues**

Location: Hall 3

Chair: Dr. Volker PICKERT, NEWCASTLE UNIVERSITY, UNITED KINGDOM
Co-Chair:

0246 - Electric, Hybrid Electric and Combustion Engine Driven Cars and their Impact on Environment

CEROVSKY Zdenek - CZECH TECHNICAL UNIVERSITY IN PRAGUE - CZECH REPUBLIC
MINDL Pavel - CZECH TECHNICAL UNIVERSITY IN PRAGUE - CZECH REPUBLIC

0270 - Hardware-in-the-Loop Capable State-Space-Averaging Models for Power Converters in Discontinuous Conduction Mode considering Parasitic Component Behavior

KIFFE Axel - HOCHSCHULE OSTWESTFALEN-LIPPE UNIVERSITY OF APPLIE - GERMANY
FORMANN Sebastian - HOCHSCHULE OSTWESTFALEN-LIPPE UNIVERSITY OF APPLIE - GERMANY
SCHULTE Thomas - HOCHSCHULE OSTWESTFALEN-LIPPE UNIVERSITY OF APPLIE - GERMANY
MAAS Jürgen - HOCHSCHULE OSTWESTFALEN-LIPPE UNIVERSITY OF APPLIE - GERMANY

0305 - Vehicle Fuel Consumption Simulation Model using VHDL-AMS

ABE Takashi - NAGASAKI UNIVERSITY - JAPAN
TAKAYAMA Syouta - NAGASAKI UNIVERSITY - JAPAN
HIGUCHI Tsuyoshi - NAGASAKI UNIVERSITY - JAPAN
TSUJI Kimitoshi - TOYOTA MOTOR CORP. - JAPAN
SHIGEMATSU Koichi - CYBERNET SYSTEMS CO., LTD - JAPAN

0446 - Simulation of a commercial electric vehicle: dynamic aspects and performance

SOUSA Duarte - INSTITUTO SUPERIOR TECNICO - TU LISBON - PORTUGAL
ROQUE António - EST SETUBAL - PORTUGAL
TERRAS José - INSTITUTO SUPERIOR TECNICO - TU LISBON - PORTUGAL
NEVES André - INSTITUTO SUPERIOR TECNICO - TU LISBON - PORTUGAL

0577 - Transient modeling of an integrated charger for a plug-in hybrid electric vehicle

ZHAO Shuang - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
HAGHBIN Saeid - CHALMERS UNIVERSITY OF TECHNOLOGY - SWEDEN
WALLMARK Oskar - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
LEKSELL Mats - KTH ROYAL INSTITUTE OF TECHNOLOGY - SWEDEN
LUNDMARK Sonja - CHALMERS UNIVERSITY OF TECHNOLOGY - SWEDEN
CARLSON Ola - CHALMERS UNIVERSITY OF TECHNOLOGY - SWEDEN

0650 - Selection of a Semi-Empirical Model for use as a Real Time Model in a Virtual Fuel Cell

TAYLOR Rachel - NEWCASTLE UNIVERSITY - UNITED KINGDOM
PICKERT Volker - NEWCASTLE UNIVERSITY - UNITED KINGDOM
ARMSTRONG Matthew - NEWCASTLE UNIVERSITY - UNITED KINGDOM
HOLDEN John - HILTECHDEVELOPMENTS - UNITED KINGDOM

0906 - Experimental and simulation methods for evaluation of electrical bicycle motor drives on riding profiles

SINCERO Geraldo - LAVAL UNIVERSITY - CANADA
CROS Jérôme - LAVAL UNIVERSITY - CANADA
TAGHIZADEH KAKHKI Mehdi - UNIVERSITÉ LAVAL - CANADA
MARTINS Carlos - UNIVERSITÉ LAVAL - CANADA

0933 - PSIM Dynamic Simulator for Analysis of SPHEV Operation

CHOI Jaeho - CHUNGBUK NATIONAL UNIVERSITY - KOREA
LIM Deokyoung - CHUNGBUK NATIONAL UNIVERSITY - KOREA
WINDARKO Novie Ayub - CHUNGBUK NATIONAL UNIVERSITY - KOREA

0942 - An electric vehicle model and a driving cycle for mail delivery use

AL JED Habib - EIGSI - FRANCE
MIEZE Andre - EIGSI - FRANCE
VINASSA Jean-Michel - IMS LAB - UNIVERSITY OF BORDEAUX - FRANCE

14:10 **DS2c: Topic 1: Silicon Power Diode and Thyristor Devices and Monolithic Integration, System on Chip**

Location: Hall 3

Chair: Prof. Dr. Stephane LEFEBVRE, CNAM / SATIE, FRANCE
Co-Chair:

0218 - Package Design of High Power Thyristor Based Devices with Integrated MOS Structure

BRAGARD Michael - RWTH AACHEN UNIVERSITY - GERMANY
RONGE Christian - RWTH AACHEN UNIVERSITY - GERMANY
DE DONCKER Rik W. - RWTH AACHEN UNIVERSITY - GERMANY

0373 - Turn-off Behavior of 4.5 kV Asymmetric IGBTs under Zero Voltage Switching Conditions

LENKE Robert - EON ENERGY RESEARCH CENTER - GERMANY
DE DONCKER Rik W. - EON ENERGY RESEARCH CENTER - GERMANY
SAN-SEBASTIAN Jon - IKERLAN-IK4 - SPAIN
ETXEBERRIA-OTADUI Ion - IKERLAN-IK4 - SPAIN
TARABORRELLI Silvano - EON ENERGY RESEARCH CENTER - GERMANY
VAN HOEK Hauke - EON ENERGY RESEARCH CENTER - GERMANY

0602 - A 200mA Switched Capacitor Voltage Regulator on 32nm CMOS and regulation schemes to enable DVFS

JAIN Rinkle - INTEL CORPORATION - UNITED STATES OF AMERICA
SANDERS Seth - UNIVERSITY OF CALIFORNIA - UNITED STATES OF AMERICA

0805 - Measurements on IGBTs and Diodes Series Connection

KERIM Aiman - ABB - SWITZERLAND
STEINKE Juergen - ABB - SWITZERLAND
OEDEGARD Björn - ABB - SWITZERLAND
REICHERT Stefan - ABB - SWITZERLAND

0935 - n-type doping of silicon by proton implantation

KLUG Jan N. - RUHR UNIVERSITY BOCHUM - GERMANY
LUTZ Josef - TU CHEMNITZ - GERMANY
MEIJER Jan B. - RUHR UNIVERSITY BOCHUM - GERMANY

0936 - One more way to increase the recovery softness of fast high-voltage diodes

SURMA Alexey - PROTON-ELECTROTEX - RUSSIA
GUBAREV Vitaly - PROTON-ELECTROTEX - RUSSIA
STAVTSEV Alexandr - PROTON-ELECTROTEX - RUSSIA
CHERNIKOV Anatoly - PROTON-ELECTROTEX - RUSSIA
VETROV Igor - PROTON-ELECTROTEX - RUSSIA

14:10 **DS2d: Topic 1: Simulation, Modelling and Virtual Prototyping, Control and Protection of Power Devices**

Location: Hall 3

Chair: Dr. John SCHOENBERGER, PLEXIM GMBH, SWITZERLAND
Co-Chair:

0005 - A Comprehensive Physics-Based Power MOSFET Model in VHDL-AMS for Circuit Simulations

GOEHLER Lutz - HS LAUSITZ - GERMANY
ROSE Matthias - DMOS GMBH - GERMANY

0124 - Construction of a Multi-Frequency Compact Electro-Thermal Model for IGBT-Based Power Inverters

ANTONIOS Joe - IREENA - UNIVERSITE DE NANTES - FRANCE
BATARD Christophe - IREENA - UNIVERSITE DE NANTES - FRANCE
GINOT Nicolas - IREENA - UNIVERSITE DE NANTES - FRANCE
SCUDELLER Yves - LGMPA - UNIVERSITE DE NANTES - FRANCE
MACHMOUM Mohamed - IREENA - UNIVERSITE DE NANTES - FRANCE

0149 - IGBT Series Connection under Active Voltage Control

HE Weiwei - UNIVERSITY OF CAMBRIDGE - UNITED KINGDOM
PALMER Patrick - UNIVERSITY OF CAMBRIDGE - UNITED KINGDOM
ZHANG Xueqiang - UNIVESITY OF CAMBRIDGE - UNITED KINGDOM
SNOOK Mark - AMANTYS LTD. - UNITED KINGDOM
WANG Zhihan - SHENZHEN BRONZE TECHNOLOGIES LTD - CHINA

0173 - Enhanced Oscillation Circuit Analysis of Switching Mode Power Supplies

HÖCH Vera - ILMENAU UNIVERSITY OF TECHNOLOGY - GERMANY
SCHLÖGL Andreas - INFINEON TECHNOLOGIES AG - GERMANY
PETZOLDT Jürgen - ILMENAU UNIVERSITY OF TECHNOLOGY - GERMANY
REIMANN Tobias - ISLE GMBH - GERMANY

0393 - Modeling of IGBTs With Focus on Voltage Dependency of Terminal Capacitances

TOMINAGA Shinji - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN
URUSHIBATA Hiroaki - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN
FUJITA Hideaki - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN
AKAGI Hirofumi - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN
HORIGUCHI Takeshi - MITSUBISHI ELECTRIC CO. - JAPAN
KINOUCI Shinichi - MITSUBISHI ELECTRIC CO. - JAPAN
OI Takeshi - MITSUBISHI ELECTRIC CO. - JAPAN

0416 - A magnetically isolated gate driver for high-speed voltage sharing in series-connected MOSFETs

ANTHONY Philip - UNIVERSITY OF BRISTOL - UNITED KINGDOM
MCNEILL Neville - UNIVERSITY OF BRISTOL - UNITED KINGDOM
HOLLIDAY Derrick - UNIVERSITY OF BRISTOL - UNITED KINGDOM
GRANT Duncan - UNIVERSITY OF BRISTOL - UNITED KINGDOM
HEARN George - UNIVERSITY OF BRISTOL - UNITED KINGDOM

0452 - Active Protections for Normally-On SiC JFET

DUBOIS Fabien - AMPERE, UNIVERSITE DE LYON - FRANCE
BERGOGNE Dominique - AMPERE, UNIVERSITE DE LYON - FRANCE
RISALETTO Damien - AMPERE, UNIVERSITE DE LYON - FRANCE
MOREL Herve - AMPERE, UNIVERSITE DE LYON - FRANCE
BUTTAY Cyril - AMPERE, UNIVERSITE DE LYON - FRANCE
MEURET Regis - HISPANO-SUIZA - FRANCE

0487 - Evaluation of Inherent Elements in a SiC Power MOSFET by Its Equivalent Circuit

PHANKONG Nathabhat - RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI - THAILAND
YANAGI Tatsuya - KYOTO UNIVERSITY - JAPAN
HIKIHARA Takashi - KYOTO UNIVERSITY - JAPAN

0569 - Adaption of MOSFETs Current Slope by Systematic Adjustment of Common Source Stray Inductance and Gate Resistance

WITTIG Bjoern - UNIVERSITY OF KIEL - GERMANY
MUEHLFELD Ole - UNIVERSITY OF KIEL - GERMANY
FUCHS Friedrich W. - UNIVERSITY OF KIEL - GERMANY

0612 - Ultrafast Turn-Off of a Normally-On SiC JFET for Protection Against Short-Circuit Operation

DUBOIS Fabien - AMPERE, UNIVERSITE DE LYON - FRANCE
RISALETTO Damien - AMPERE LABORATORY , UNIVERSITE DE LYON - FRANCE
BERGOGNE Dominique - AMPERE LABORATORY , UNIVERSITE DE LYON - FRANCE
PERRIN Remi - AMPERE LABORATORY , UNIVERSITE DE LYON - FRANCE
ZAOUI Abderrahime - AMPERE LABORATORY , UNIVERSITE DE LYON - FRANCE
MOREL Herve - AMPERE LABORATORY , UNIVERSITE DE LYON - FRANCE
MEURET Régis - HISPANO-SUIZA - FRANCE

0634 - A Datasheet Driven Power MOSFET Model and Parameter Extraction Procedure for 1200V, 20A SiC MOSFETs

MUDHOLKAR Mihir - UNIVERSITY OF ARKANSAS - UNITED STATES OF AMERICA
SAADEH Mahmood - UNIVERSITY OF ARKANSAS - UNITED STATES OF AMERICA
MANTOOTH Alan - UNIVERSITY OF ARKANSAS - UNITED STATES OF AMERICA

0695 - Averaging Methods for Electrical-Thermal Converter Models

SCHOENBERGER John - PLEXIM GMBH - SWITZERLAND

14:10 **DS2e: Topic 5: High Power Multilevel Converters and Voltage Regulator Modules**

Location: Hall 3

Chair: Dr. Frédéric RICHARDEAU, LAPLACE - UNIVERSITY OF TOULOUSE, FRANCE
Co-Chair:

0035 - A Comparison Between Two-commutation-cells Multichannel and Multilevel Buck-Derived Topologies

ROD Christian - EPFL - SWITZERLAND
RUFER Alfred - EPFL - SWITZERLAND

0108 - One Dimensional Feed-Forward Modulation of a Cascaded H-Bridge Multi-Level Converter including Capacitor Balancing with Reduced Switching Frequency

VODDEN John - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
WHEELER Pat - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
FRANQUELO Leopoldo G. - UNIVERSITY OF SEVILLE - SPAIN
LEON Jose I. - UNIVERSITY OF SEVILLE - SPAIN
VAZQUEZ Sergio - UNIVERSITY OF SEVILLE - SPAIN

0164 - Braking Chopper Solutions for Modular Multilevel Converters

SCHOENING Silvia - ABB SWITZERLAND LTD - SWITZERLAND
STEIMER Peter - ABB SWITZERLAND LTD - SWITZERLAND
KOLAR Johann Walter - POWER ELECTRONIC SYSTEMS LABORATORY - SWITZERLAND

0185 - Voltage balancing control in 3-Level Neutral-Point Clamped Converters using triangular carrier PWM modulation for FACTS applications

CHIVITE-ZABALZA Javier - INGETEAM TECHNOLOGY - SPAIN
IZURZA Pedro - INGETEAM TECHNOLOGY - SPAIN
CALVO Gorka - INGETEAM TECHNOLOGY - SPAIN

RODRIGUEZ-VIDAL Miguel - INGETEAM T&D - SPAIN

0271 - Harmonic Optimization for Multilevel Converters Using Space Vector Fundamental Frequency Modulation

MEHLMANN Gert - INSTITUTE OF ELECTRICAL POWER SYSTEMS - GERMANY

VON ZIMMERMANN Moritz - INSTITUTE OF ELECTRICAL DRIVES AND MACHINES - GERMANY

PIEPENBREIER Bernhard - INSTITUTE OF ELECTRICAL DRIVES AND MACHINES - GERMANY

HEROLD Gerhard - INSTITUTE OF ELECTRICAL POWER SYSTEMS - GERMANY

0317 - PWM-Based Control of a Cascaded Three-Phase Multilevel Inverter

MARTINS António - UNIVERSITY OF PORTO - FACULTY OF ENGINEERING - PORTUGAL

MEIRELES Emanuel - UNIVERSITY OF PORTO - FACULTY OF ENGINEERING - PORTUGAL

CARVALHO Adriano - UNIVERSITY OF PORTO - FACULTY OF ENGINEERING - PORTUGAL

0354 - Improving the Performance of Modular Multilevel Converter by Reducing the Dead Time Effect

LI Zixin - CHINESE ACADEMY OF SCIENCES - CHINA

LI Yaohua - CHINESE ACADEMY OF SCIENCES - CHINA

WANG Ping - CHINESE ACADEMY OF SCIENCES - CHINA

ZHU Haibin - INSTITUTE OF ELECTRICAL ENGINEERING - CHINA

CHU Zunfang - INSTITUTE OF ELECTRICAL ENGINEERING - CHINA

WANG Song - INSTITUTE OF ELECTRICAL ENGINEERING - CHINA

0357 - Research on three-phase PWM Hybrid-Clamped five-level AC-DC converter with high power factor

YIN Kai - ZHEJIANG UNIVERSITY - CHINA

MA Mingyao - ZHEJIANG UNIVERSITY - CHINA

TAN Cheng - ZHEJIANG UNIVERSITY - CHINA

LIU Quanwei - ZHEJIANG UNIVERSITY - CHINA

DENG Yan - ZHEJIANG UNIVERSITY - CHINA

HE Xiangning - ZHEJIANG UNIVERSITY - CHINA

0400 - Open-loop Approach to Control a Modular Multilevel Frequency Converter

ANGQUIST Lennart - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

HAIDER Arif - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

JIANG Hongbo - TRAFIKVERKET - SWEDEN

NEE Hans-Peter - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

0406 - A New Multilevel Converter with Multi-Windings Medium-Frequency Transformer

ZHENG Zedong - TSINGHUA UNIVERSITY - CHINA

GAO Zhigang - TSINGHUA UNIVERSITY - CHINA

LI Yongdong - TSINGHUA UNIVERSITY - CHINA

0497 - Design Optimization of a Five-level Active NPC

KASHIHARA Yugo - NAGAOKA UNIVERSITY OF TECHNOLOGY - JAPAN

ITO Jun-ichi - NAGAOKA UNIVERSITY OF TECHNOLOGY - JAPAN

0498 - Multilevel Converters for 10 MW Wind Turbines

MA Ke - AALBORG UNIVERSITY - DENMARK

BLAABJERG Frede - AALBORG UNIVERSITY - DENMARK

0530 - Circuit for reducing devices voltage stress due to DC-link capacitor voltage ripple in a Neutral-Point-Clamped inverter

ORFANOUDAKIS Georgios - UNIVERSITY OF SOUTHAMPTON, UK - UNITED KINGDOM

SHARKH Suleiman - UNIVERSITY OF SOUTHAMPTON, UK - UNITED KINGDOM

YURATICH Michael - TSL TECHNOLOGY - UNITED KINGDOM

0545 - A Versatile DC-DC Converter for Energy Collection and Distribution using the Modular Multilevel Converter

KENZELMANN Stephan - EPFL - IEL - LEI - SWITZERLAND

RUFER Alfred - LEI - EPFL - SWITZERLAND

VASILADIOTIS Michail - EPFL - IEL - LEI - SWITZERLAND

DUJIC Drazen - ABB CORPORATE RESEARCH - SWITZERLAND

CANALES Francisco - ABB CORPORATE RESEARCH - SWITZERLAND

DE NOVAES Yales - UDESC - STATE UNIVERSITY OF SANTA CATARINA - BRAZIL

0575 - Power and DC Link Voltage Control Considerations for Indirect AC/AC Modular Multilevel Converters

VASILADIOTIS Michail - EPFL - SWITZERLAND

KENZELMANN Stephan - EPFL - SWITZERLAND

CHERIX Nicolas - EPFL - SWITZERLAND

RUFER Alfred - EPFL - SWITZERLAND

0589 - A new 5-Level Topology allowing the balancing of the DC bus capacitors voltages

LEREDDE Alexandre - LAPLACE - FRANCE

GATEAU Guillaume - LAPLACE - FRANCE

0618 - Power Losses Evaluation of Three Multilevel Converter Topologies for Direct Interface with Medium Voltage Grids

RASHED Mohamed - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

KLUMPNER Christian - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

ASHER Greg - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

0620 - A Comparison of PWM Techniques for Three-Level Five-Phase Voltage Source Inverters

DORDEVIC Bbrad - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

JONES Martin - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

LEVI Emil - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

0626 - AC power source based on series-connection between cascaded PWM multilevel inverter and linear power amplifier

BELTRAME Rafael Concatto - UFSM - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

RECH Cassiano - UFSM - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

MARTINS Mario Lucio da Silva - UTFPR - FEDERAL UNIVERSITY OF TECHNOLOGY - PARANA - BRAZIL

HEY Helio Leaes - UFSM - FEDERAL UNIVERSITY OF SANTA MARIA - BRAZIL

0702 - Evaluation and Proposal of MMC-HVDC Control Strategies under Transient and Steady State Conditions

BERGNA Gilbert - SUPELEC - EDF - FRANCE

BOYRA Maialen - SUPELEC - FRANCE

VIVAS José - UNIVERSIDAD SIMÓN BOLÍVAR - VENEZUELA

0727 - Fault Detection in multilevel cascaded inverter using Parks Vector approach with balanced battery power usage

VENTURA Rui - INSTITUTO DE TELECOMUNICAÇÕES /UC - PORTUGAL

MENDES Andre - INSTITUTO DE TELECOMUNICAÇÕES /UC - PORTUGAL

CARDOSO Antonio - INSTITUTO DE TELECOMUNICAÇÕES /UC - PORTUGAL

0838 - Novel High Efficiency Multilevel DC-DC Boost Converter Topologies and Modulation Strategies

BUTTI Gianluca - ETH ZURICH - SWITZERLAND

BIELA Jürgen - ETHZ - SWITZERLAND

0843 - DC-link Voltage Oscillations Reduction During Unbalanced Grid Faults for High Power Wind Turbines

MIRANDA Hernan - AALBORG UNIVERSITY - DENMARK

TEODORESCU Remus - AALBORG UNIVERSITY - DENMARK

RODRIGUEZ Pedro - POLITECHNICAL UNIVERSITY OF CATALUNYA - SPAIN

HELLE Lars - VESTAS WIND SYSTEMS - DENMARK

0855 - A New Capacitor Balancing Technique in Diode-Clamped Multilevel Converters with Active Front End for Extended Operation Range

MARCHESONI Mario - UNIVERSITY OF GENOVA - ITALY

FAZIO Paolo - UNIVERSITY OF GENOVA - ITALY

MARAGLIANO Gianmarco - UNIVERSITY OF GENOVA - ITALY

VACCARO Luis - UNIVERSITY OF GENOVA - ITALY

14:10 **DS2f: Topic 5: Matrix Converters**

Location: Hall 3

Chair: Dr. Ruben PENA, UNIVERSITY OF CONCEPCION, CHILE
Co-Chair:

0120 - Performance Optimization of a Square wave operation in an Indirect Matrix Converter with a Reactor free DC Boost Converter

TECK CHIANG Goh - NAGAOKA UNIVERSITY OF TECHNOLOGY - JAPAN

ITO Jun-ichi - NAGAOKA UNIVERSITY OF TECHNOLOGY - JAPAN

0186 - An Open-Circuit Faults Diagnosis Method for Matrix Converters based on DWT Analysis of Output Current

POTAMIANOS Panagiotis - UNIVERSITY OF PATRAS - GREECE

MITRONIKAS Epaminondas - UNIVERSITY OF PATRAS - GREECE

SAFACAS Athanasios - UNIVERSITY OF PATRAS - GREECE

0314 - Matrix Converter Systems Stability Analysis Taking into Account Switching Effects

COX Stephen - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

ZANCHETTA Pericle - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0368 - Improved modulation of two-stage matrix converter for EMA in aircraft applications

XIAO Kun - BEIHANG UNIVERSITY - CHINA

WANG Lina - BEIHANG UNIVERSITY - CHINA

WHEELER Pat - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0408 - Experimental Verification for a Matrix Converter with a V-connection Chopper

KOIWA Kazuhiro - NAGAOKA UNIVERSITY OF TECHNOLOGY - JAPAN

ITO Jun-ichi - NAGAOKA UNIVERSITY OF TECHNOLOGY - JAPAN

0664 - A Simple Current Control Method with Instantaneous Reactive Power Minimization for Four-Leg Indirect Matrix Converters

RIVERA Marco - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

CONTRERAS Ivan - UNIVERSIDAD TECNICA FEDERICO SANTA MARIA - CHILE

RODRIGUEZ Jose - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE
PEÑA Ruben - UNIVERSIDAD DE CONCEPCION - CHILE
WHEELER Patrick - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0711 - Eliminating Current Sensors of Indirect Matrix Converter Using Neuro-Fuzzy Controller

JAHANGIRI Alireza - K. N. TOOSI UNIVERSITY OF TECHNOLOGY - IRAN
RADAN Ahmad - K. N. TOOSI UNIVERSITY OF TECHNOLOGY - IRAN

0745 - Control of a Brushless Doubly-Fed Induction Generator via a Matrix Converter

PENA Ruben - UNIVERSITY OF CONCEPCION - CHILE
CARDENAS Roberto - UNIVERSITY OF SANTIAGO - CHILE
MUÑOZ Andres - UNIVERSITY OF SANTIAGO - CHILE
SUREDA Alvaro - UNIVERSITY OF SANTIAGO - CHILE
CLARE Jon - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
WHEELER Pat - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0766 - Poly-Phased Matrix Converter - A 27 input phases to 3 output phases experimental set-up running with hard and soft commutations

BEGUIN Antoine - EPFL - IEL - LEI - SWITZERLAND
RUFER Alfred - EPFL - SWITZERLAND

0800 - A SINGLE LOOP VOLTAGE CONTROLLER BASED REPETITIVE CONTROL FOR A MATRIX CONVERTER

ROHOUMA Wesam - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0840 - Open-Circuited Switch Fault Detection for Fault Tolerant Matrix Converter Motor Drive Systems

KHWAN-ON Sudarat - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
DE LILLO Liliانا - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
EMPRINGHAM Lee - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
WHEELER Patrick - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

0898 - Calorimetric comparison of the use of silicon carbide diodes in a 100kW matrix converter for aerospace applications

EMPRINGHAM Lee - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
DE LILLO Liliانا - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
WHEELER Pat - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
CLARE Jon - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

14:10 **DS2g: Topic 5: Emerging Topologies, Failure Tolerant Systems or Converters**

Location: Hall 3

Chair: Dr. Samuel GALCERAN-ARELLANO, CITCEA-UPC, SPAIN
Co-Chair:

0112 - Single-phase Boost-type Rectifier With Fault-Tolerant Capability

LE CLAIRE Jean-Claude - IREENA - FRANCE
CHALAL Karim - IREENA - FRANCE
TRIESTE Sony - IREENA - FRANCE

0198 - Multilevel two quadrant DC/DC converter for regenerative braking in mobile applications

MASSOT-CAMPOS Miquel - CITCEA-UPC - SPAIN
MONTESINOS-MIRACLE Daniel - CITCEA-UPC - SPAIN
GALCERAN-ARELLANO Samuel - CITCEA-UPC - SPAIN

RUFER Alfred - EPFL - IEL - LEI - SWITZERLAND

0230 - Derivation and Characterization of Switched-Boost Inverter

UPADHYAY Saurabh - GE GLOBAL RESEARCH - INDIA

ADDA Ravindranath - IITKANPUR - INDIA

MISHRA Santanu - IIT KANPUR - INDIA

JOSHI Avinash - IIT KANPUR - INDIA

0252 - Solutions of DC-DC converters for G-class audio amplifiers in mobile platforms

BRANCA Xavier - ST-ERICSSON - FRANCE

ALLARD Bruno - AMPERE LAB - FRANCE

LIN-SHI Xuefang - AMPÈRE LAB - FRANCE

0320 - Short Fail-Safe Capability and Fault Diagnosis Strategies Dedicated to a Reconfigurable 5-Level Double-Boost PFC

PHAM Thi Thuy Linh - LAPLACE - FRANCE

RICHARDEAU Frédéric - LAPLACE - FRANCE

GATEAU Guillaume - LAPLACE - FRANCE

0334 - Operation of multi-phase converters with coupled inductors at reduced number of phases

UTZ Sebastian - UNIVERSITY OF APPLIED SCIENCES - GERMANY

PFORR Johannes - UNIVERSITY OF APPLIED SCIENCES - GERMANY

0519 - Study on the PWM Methods of an Energy Storage Devices Directly Connected Inverter with EDLCs

IDE Yoshihiro - CHIBA UNIVERSITY - JAPAN

KONDO Keiichiro - CHIBA UNIVERSITY - JAPAN

0661 - DC-link Voltage Ripple Analysis and Impedance Network Design of Single-phase Z-source Inverter

YU Yifan - HARBIN INSTITUTE OF TECHNOLOGY - CHINA

ZHANG Qianfan - HARBIN INSTITUTE OF TECHNOLOGY - CHINA

LIU Xiaofei - HARBIN INSTITUTE OF TECHNOLOGY - CHINA

CUI Shumei - HARBIN INSTITUTE OF TECHNOLOGY - CHINA

0704 - A NEW FAULT DETECTION METHOD FOR NPC CONVERTERS

MARCHESONI Mario - UNIVERSITY OF GENOVA - ITALY

FAZIO Paolo - UNIVERSITY OF GENOVA - ITALY

MARAGLIANO Gianmarco - UNIVERSITY OF GENOVA - ITALY

PARODI Gianluca - UNIVERSITY OF GENOVA - ITALY

0955 - MODULAR QUASI-8-LEVEL INVERTER TOPOLOGY BY BINARY VOLTAGE ADDING THROUGH TRANSFORMERS WITH TEST BENCH RESULTS

WEISS Helmut - UNIVERSITY OF LEOBEN - AUSTRIA

14:10 **DS2h: Topic 6: Converter Control, Current/Voltage Control**

Location: Hall 3

Chair: Prof. Dr. Nobukazu HOSHI, TOKYO UNIVERSITY OF SCIENCE, JAPAN
Co-Chair:

0116 - FPGA-based Sliding Mode Direct Power Control of three-phase PWM boost rectifier

HEMDANI Asma - LSE-ENIT - TUNISIA

NAOUAR Wissem - ENIT - TUNISIA

SLAMA-BELKHODJA Ilhem - LSE-ENIT - TUNISIA

MONMASSON Eric - SATIE-UCP - FRANCE

0170 - Ripple current minimization of an interleaved-switched multi-phase PWM inverter for three-phase machine-emulation

NEMEC Christian - UNIVERSITÄT STUTTGART - GERMANY

ROTH-STIELOW Jörg - UNIVERSITÄT STUTTGART - GERMANY

0171 - Investigation of Control Scheme based on Stationary Reference Frame Using Three Level Space Vector Modulated Grid Connected Inverter with NP Balancing Algorithm

TSENGENES Georgios - DEMOCRITUS UNIVERSITY OF THRACE - GREECE

NATHENAS Thomas - DEMOCRITUS UNIVERSITY OF THRACE - GREECE

ADAMIDIS Georgios - DEMOCRITUS UNIVERSITY OF THRACE - GREECE

0196 - Feasibility of time-delay based frequency-control of a sliding-mode buck converter.

LABBE Benoît - ST-ERICSSON - FRANCE

ALLARD Bruno - LABORATOIRE AMPERE - FRANCE

CHESNEAU David - ST-ERICSSON - FRANCE

0295 - Seven-Level Single-Leg Flying Capacitor Converter Voltage Balancing Dynamics Analysis

REZNIKOV Boris - GENERAL SATELLITE CORP - RUSSIA

RUDERMAN Alex - ELMO MOTION CONTROL LTD - ISRAEL

0324 - Digital Proportional-Resonant (PR) Control with Anti-Windup Applied to a Voltage-Source Inverter

RICHTER Sebastian - RWTH AACHEN UNIVERSITY - GERMANY

DE DONCKER Rik - RWTH AACHEN UNIVERSITY - GERMANY

0394 - Railway Catenary Parameters Identification based on Harmonic Current Injection

BAHRANI Behrooz - EPFL - IEL - LEI - SWITZERLAND

RUFER Alfred - EPFL - IEL - LEI - SWITZERLAND

AEBERHARD Martin - SCHWEIZERISCHE BUNDESBAHNEN SBB - SWITZERLAND

0549 - A New Peak-Current Injected Digital Control Circuit for DC-DC Converter

KUROKAWA Fujio - NAGASAKI UNIVERSITY - JAPAN

KOMICHI Yoshihiko - NAGASAKI UNIVERSITY - JAPAN

0587 - Model Predictive Control Strategies for DC-DC Boost Voltage Conversion

KARAMANAKOS Petros - NATIONAL TECHNICAL UNIVERSITY OF ATHENS - GREECE

PAPAFOTIOU Giorgios - ABB CORPORATE RESEARCH - SWITZERLAND

MANIAS Stefanos - NATIONAL TECHNICAL UNIVERSITY OF ATHENS - GREECE

0655 - Control scheme for Source Voltage Sensorless PWM Converters under Source Voltage Unbalance

JUNG Eunsoo - SEOUL NATIONAL UNIVERSITY - KOREA

KIM Myounggho - SEOUL NATIONAL UNIVERSITY - KOREA

SUL Seung-Ki - SEOUL NATIONAL UNIVERSITY - KOREA

0908 - A comparative study of Predictive Current Control for Three-Phase Voltage Source Inverters based on switching frequency and current error

CORTES Patricio - UNIVERSIDAD TECNICA FEDERICO SANTA MARIA - CHILE

VATTUONE Luna - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

RODRIGUEZ Jose - UNIVERSIDAD TECNICA FEDERICO SANTA MARÍA - CHILE

0939 - Current Control Design with a Fractional-Order PID for a Three-Level Inverter

ARAB TEHRANI Kambiz - IPDRP - FRANCE

14:10 **DS2i: Topic 17: Power Supplies I**

Location: Hall 3

Chair: Prof. Dr. Tomoki YOKOYAMA, TOKYO DENKI UNIVERSITY, JAPAN
Co-Chair:

0036 - Multiobjective optimal choice and design of isolated dc-dc power converters

VERSELE Christophe - FACULTE POLYTECHNIQUE DE MONS - UMONS - BELGIUM

DEBLECKER Olivier - FACULTE POLYTECHNIQUE DE MONS - UMONS - BELGIUM

LOBRY Jacques - FACULTE POLYTECHNIQUE DE MONS - UMONS - BELGIUM

0037 - A surface response methodology approach to study the influence of specifications in the multiobjective optimal design of power converters

VERSELE Christophe - FACULTE POLYTECHNIQUE DE MONS - UMONS - BELGIUM

DEBLECKER Olivier - FACULTE POLYTECHNIQUE DE MONS - UMONS - BELGIUM

LOBRY Jacques - FACULTE POLYTECHNIQUE DE MONS - UMONS - BELGIUM

0077 - Harmonics reduction in high-efficiency operation of double-conversion UPS

GIUNTINI Lorenzo - GE CONSUMER & INDUSTRIAL SA - SWITZERLAND

0162 - Design study of low ripple and large current dc power supply for fusion plant's superconducting magnet

CHIKARAISHI Hirotaka - NATIONAL INSTITUTE FOR FUSION SCIENCE - JAPAN

0268 - Stability analysis of multi-parallel APF systems

DANG Pengpai - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY

PETZOLDT Jürgen - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY

ELLINGER Thomas - TECHNISCHE UNIVERSITÄT ILMENAU - GERMANY

0278 - MASH Delta-Sigma DPWM based Sliding-Mode Controller dedicating to High Frequency SMPS

LI Bo - AMPERE, UNIVERSITE DE LYON - FRANCE

GUO Shuibao - AMPERE, UNIVERSITE DE LYON - FRANCE

LIN-SHI Xuefang - AMPERE, UNIVERSITE DE LYON - FRANCE

ALLARD Bruno - AMPERE, UNIVERSITÉ DE LYON - FRANCE

0321 - Design Considerations for the Fast Charge of Supercapacitors in the Frame of Low Voltage Applications

DELALAY Simon - EPFL - IEL - LEI - SWITZERLAND

BARRADE Philippe - LEI - EPFL - SWITZERLAND

RUFER Alfred - LEI - EPFL - SWITZERLAND

0363 - Disturbance Compensation Method for Single Phase Utility Interactive Inverter with FPGA based Hardware Controller

YOKOYAMA Tomoki - TOKYO DENKI UNIVERSITY - JAPAN

SAIGUSA Takahiro - TOKYO DENKI UNIVERSITY - JAPAN

HANASHIMA Yuichi - TOKYO DENKI UNIVERSITY - JAPAN

0441 - A high frequency high voltage power supply

MAO Saijun - GE - CHINA

0517 - Fault Detection Algorithm for an UPS Operation of Power Station

JUNG Dooyong - SUNGKYUNKWAN UNIVERSITY - KOREA

JI Younghyok - SUNGKYUNKWAN UNIVERSITY - KOREA
KIM Jungu - SUNGKYUNKWAN UNIVERSITY - KOREA
RYU Dongkyun - SUNGKYUNKWAN UNIVERSITY - KOREA
WON Chung Yuen - SUNGKYUNKWAN UNIVERSITY - KOREA

0576 - Universal DC-DC converter using SEPIC

LI Nan - AMPERE LABORATORY , UNIVERSITE DE LYON - FRANCE
LIN-SHI Xuefang - AMPERE LABORATORY, UNIVERSITE DE LYON - FRANCE
LEFRANC Pierre - SUPELEC - FRANCE
JAAFAR Ali - SUPELEC - FRANCE
GODOY Emmanuel - SUPELEC - FRANCE

0707 - A Hold-up Time Extending Method for Asymmetrical Half-bridge Converter

KIM Jintae - FAIRCHILD SEMICONDUCTOR - KOREA
SHANMEI Li - FAIRCHILD SEMICONDUCTOR - KOREA

0712 - Mix-Voltage Power Conversion for Single-Inductor Dual-Output (SIDO) Boost Converters and SIDO Bipolar Converters

HUANG Chun-Shih - NATIONAL TAIWAN UNIVERSITY - TAIWAN (China)
CHEN Dan - NATIONAL TAIWAN UNIVERSITY - TAIWAN (China)
WU Tsung-Han - NATIONAL TAIWAN UNIVERSITY - TAIWAN (China)
CHEN Yung-Jen - NATIONAL TAIWAN UNIVERSITY - TAIWAN (China)

0721 - Design and Implementation of the Distributed Control for Parallel AC/DC Converters

KAMNARN Uthen - RAJAMANGALA UNIVERSITY OF TECHNOLOGY LANNA - THAILAND
KANTHAPHAYAO Yutthana - KING MONGKUT'S UNIVERSITY OF TECHNOLOGY NB - THAILAND
CHUNKAG Viboon - KING MONGKUT'S UNIVERSITY OF TECHNOLOGY NB - THAILAND
YOUSAWAT Surasak - RAJAMANGALA UNIVERSITY OF TECHNOLOGY LANNA - THAILAND

0894 - Behavioral Analysis of a single-switch step up converter

TATAKIS Emmanuel - UNIVERSITY OF PATRAS - GREECE
KALOGEROPOULOU Margarita - UNIVERSITY OF PATRAS - GREECE
CHRISTIDIS Georgios - UNIVERSITY OF PATRAS - GREECE

14:10 DS2j: Topic 17: Power Supplies II

Location: Hall 3

Chair: Dr. Patrick LUK, CRANFIELD UNIVERSITY, UNITED KINGDOM
Co-Chair:

0091 - High Frequency AC Distributed Power System for Fluorescent Lighting

LUK Patrick - CRANFIELD UNIVERSITY - UNITED KINGDOM
NG Seng Yim - CRANFIELD UNIVERSITY - UNITED KINGDOM
JINUPUN Ken - CRANFIELD UNIVERSITY - UNITED KINGDOM

0128 - Contactless Energy Transfer System for Computer Peripherals

MEYER Pascal - EPFL-IMT-LAI - SWITZERLAND
GERMANO Paolo - EPFL-IMT-LAI - SWITZERLAND
PERRIARD Yves - EPFL-IMT-LAI - SWITZERLAND

0410 - Two phase interleaved buck converter for driving high power LEDs

BECZKOWSKI Szymon - AALBORG UNIVERSITY - DENMARK

MUNK-NIELSEN Stig - AALBORG UNIVERSITY - DENMARK

0431 - Multi-technology pre-sizing optimization of a generic inverter and its input filter

LEDOUX Christophe - SUPELEC E3S - FRANCE

LEFRANC Pierre - SUPELEC E3S - FRANCE

LAROUCI Chérif - ESTACA - FRANCE

0448 - Investigation of Tradeoffs between Efficiency, Power Density and Switching Frequency in Three-phase Two-level PWM Boost Rectifier

WEN Bo - VIRGINIA TECH - UNITED STATES OF AMERICA

BOROYEVICH Dushan - VIRGINIA TECH - UNITED STATES OF AMERICA

MATTAVELLI Paolo - VIRGINIA TECH - UNITED STATES OF AMERICA

0656 - A New Approach to Higher Density Rectifier with SiC Power Devices for 380V DC Distribution System

HAYASHI Yusuke - NTT FACILITIES, INC. - JAPAN

MINO Masato - NTT FACILITIES, INC. - JAPAN

0686 - Design Approach for the Cold Cathode Fluorescent Lamps Backlight Inverters with Lamp Current Balancing Chokes

HSIA Tsun-Hsiao - NATIONAL TAIWAN UNIVERSITY - TAIWAN (China)

LEE Martin - CHICONY POWER TECHNOLOGY CO.,LTD. - TAIWAN (China)

CHEN Dan - NATIONAL TAIWAN UNIVERSITY - TAIWAN (China)

KU Chung-Ping - NATIONAL TAIWAN UNIVERSITY - TAIWAN (China)

0868 - Comparative Estimation of Efficiency of LED Dimmers at Different Modulation Techniques

GALKIN Ilya - RIGA TECHNICAL UNIVERSITY - LATVIA

TETERVENOK Oleg - RIGA TECHNICAL UNIVERSITY - LATVIA

MILASHEVSKI Irena - TALLINN UNIVERSITY OF TECHNOLOGY - ESTONIA

14:10 **DS2k: Topic 15: Non-Rotating Power Generation and Storage Systems I**

Location: Hall 3

Chair: Prof. Dr. Jean-Paul GAUBERT, UNIVERSITY OF POITIERS, FRANCE

Co-Chair:

0021 - Design Control of DC/AC Converter for a grid Connected PV Systems using Matlab/Simulink

FATIMA ZAHRA Amatoul - FACULTY OF SCIENCES SEMLALIA - MAROCCO

MOULAY TAHAR Lamchich - FACULTY OF SCIENCES SEMLALIA - MAROCCO

ABDELKADER Outzourhit - FACULTY OF SCIENCES SEMLALIA - MAROCCO

0175 - Voltage-Hold Perturbation & Observation Maximum Power Point Tracking Algorithm for Improved Tracking over the Transient Atmospheric Changes

ABDALLA Imadeddin - UNIVERSITY OF LEEDS - UNITED KINGDOM

ZHANG L. - UNIVERSITY OF LEEDS - UNITED KINGDOM

CORDA J. - UNIVERSITY OF LEEDS - UNITED KINGDOM

0178 - Dielectric Elastomers as Generators

CZECH Balazs - TU DELFT - NETHERLANDS

VAN KESSEL Rick - TU DELFT - NETHERLANDS

BAUER Pavol - TU DELFT - NETHERLANDS

FERREIRA Jon Abraham - TU DELFT - NETHERLANDS

0222 - Ascertainment of Static Characteristic Fluctuation of Photovoltaic Cells and Evaluation of High-Speed Maximum Power Point Tracking Control

TANAKA Shioto - TOKYO DENKI UNIVERSITY - JAPAN
YOSHIDA Toshiya - TOKYO DENKI UNIVERSITY - JAPAN
OHNIWA Katsumi - TOKYO DENKI UNIVERSITY - JAPAN
MIYASHITA Osamu - TOKYO DENKI UNIVERSITY - JAPAN

0234 - TECHNIQUES FOR THE OPTIMAL DESIGN OF PHOTOVOLTAIC INVERTERS INTERCONNECTED WITH THE ELECTRIC GRID

KOUTROULIS Effichios - TECHNICAL UNIVERSITY OF CRETE - GREECE
BLAABJERG Frede - AALBORG UNIVERSITY - DENMARK

0352 - Generator Emulation Controls for Photovoltaic Inverters

ALATRASH Hussam - PETRA SOLAR - UNITED STATES OF AMERICA
ENSLIN Johan - PETRA SOLAR - UNITED STATES OF AMERICA

0369 - Bidirectional Converter Interface for a Battery Energy Storage Test Bench

TRINTIS Ionut - AALBORG UNIVERSITY - DENMARK
THOMAS Stephan - EON ENERGY RESEARCH CENTER - GERMANY
BLANK Tobias - ISEA - RWTH AACHEN UNIVERSITY - GERMANY
ROGGENDORF Christoph - IFHT - RWTH AACHEN UNIVERSITY - GERMANY
MUNK-NIELSEN Stig - AALBORG UNIVERSITY - DENMARK
TEODORESCU Remus - AALBORG UNIVERSITY - DENMARK

0419 - Multilevel High Voltage Converter driving Dielectric Elastomer Generators

GRAF Christian - UNI. OF APPLIED SCIENCES OSTWESTFALEN-LIPPE - GERMANY
MAAS Juergen - UNI. OF APPLIED SCIENCES OSTWESTFALEN-LIPPE - GERMANY

0424 - Dual-mode current-fed semi-quadratic buck-boost converter for transformerless modular photovoltaic applications

NOUSIAINEN Lari - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND
SUNTIO Teuvo - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

0459 - Genetic algorithms for maximum power point tracking in photovoltaic systems

GAUBERT Jean-Paul - UNIVERSITY OF POITIERS - FRANCE

0557 - Soft Switching Interleaved Active Clamp Flyback Inverter for a Photovoltaic AC Module System

KIM Young-Ho - SUNGKYUNKWAN UNIVERSITY - KOREA
KIM Jun-Gu - SUNGKYUNKWAN UNIVERSITY - KOREA
WON Chung Yuen - SUNGKYUNKWAN UNIVERSITY - KOREA
JUNG Yongchae - NAMSEOUL UNIVERSITY - KOREA
LEE Tae-Won - SAMSUNG ELECTRO-MECHANICS - KOREA

0559 - The Design And Application Of Flow Cell Systems.

LEWIS Eric - CONVERTEAM - UNITED KINGDOM

0574 - A High efficiency resonant solar micro-inverter

JOSHI Madhu - PETRA SOLAR - UNITED STATES OF AMERICA
SHOUBAKI Ehab - PETRA SOLAR - UNITED STATES OF AMERICA
AMARIN Ruba - PETRA SOLAR - UNITED STATES OF AMERICA

MODICK Bruce - PETRA SOLAR - UNITED STATES OF AMERICA
ENSLIN Johan - PETRA SOLAR - UNITED STATES OF AMERICA
TRANDAFIR Titi - PETRA SOLAR - UNITED STATES OF AMERICA
DECKER Ron - PETRA SOLAR - UNITED STATES OF AMERICA
VOHDEN Kathryn - PETRA SOLAR - UNITED STATES OF AMERICA

0601 - An all-in-one power electronic solution for the introduction of PV and storage for smart grids

CAPPELLE Jan - KAHO SINT-LIEVEN - BELGIUM
VISPOEL Stijn - KAHO SINT-LIEVEN - BELGIUM
VAN MAERHEM Thomas - KAHO SINT-LIEVEN - ASSOCIATIE K.U. LEUVEN - BELGIUM

0722 - Design and Implementation of 50kW Multi-String Photovoltaic PCS Using three-phase interleaved DC-DC converters

CHA Hanju - CHUNGNAM NATIONAL UNIVERSITY - KOREA
LEE Woojong - CHUNGNAM NATIONAL UNIVERISTY - KOREA
AN Tae-Pung - ENTEC ELECTRIC & ELECTRONIC CO - KOREA

0818 - DC-AC inverter based on a Cycloconverter Output Stage with Active Filter for peak power reduction in transformer and switches

SHATTOCK Nicholas - THE UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
KLUMPNER Christian - THE UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
ASHER Greg - THE UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0821 - Design Considerations for Core Material Selection and Operating Modes for a High Frequency Transformer Used in an Isolated DC/DC Converter

ABU HASSAN Omar - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
KLUMPNER Christian - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM
ASHER Greg - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0830 - Wind/PV/Diesel Energy System: Modeling and Sizing Optimization

ZHANG Lu - UNIVERSITY OF LE HAVRE - FRANCE
BELFKIRA Rachid - UNIVERSITY OF LE HAVRE - FRANCE
BARAKAT Georges - UNIVERSITY OF LE HAVRE - FRANCE

0836 - A Novel Design Methodology Maximizing the Weighted-Efficiency of Flyback Inverter for AC Photovoltaic Modules

NANAKOS Anastasios - UNIVERSITY OF PATRAS - GREECE
TATAKIS Emmanuel - UNIVERSITY OF PATRAS - GREECE
DIMITRAKAKIS Georgios - UNIVERSITY OF PATRAS - GREECE
PAPANIKOLAOU Nikolaos - TEI OF LAMIA - GREECE
KYRITSIS Anastasios - CRES (Center for Renewable Energy Sources) - GREECE

0940 - Optimal Structure Selection for Small-Size Hybrid Renewable Energy Plants

TESTA Antonio - UNIVERSITY OF MESSINA - DCIIM - ITALY
DE CARO Salvatore - UNIVERSITY OF MESSINA - DCIIM - ITALY
SCIMONE Tommaso - UNIVERSITY OF MESSINA - DCIIM - ITALY

08:30 **Closing session** *Location: Hall 1*
Chair: Prof. Patrick WHEELER, UNIVERSITY OF NOTTINGHAM, UNITED KINGDOM
Co-Chair: Prof. Dr. Ir. Jean-Luc THOMAS, CONSERVATOIRE NATIONAL DES ARTS ET METIERS, FRANCE

09:00 **Keynote 3: Power Electronics for Smart Grids and Renewable Energy Sources** *Location: Hall 1*
Chair: Dr. Colin OATES, ALSTOM GRID, UNITED KINGDOM
Co-Chair: Prof. Dr. Ir. Philippe LATAIRE, VRIJE UNIVERSITEIT BRUSSEL, BELGIUM

08:30 **0965 - Power Transmission with Power Electronics**
DAVIDSON Colin - ALSTOM GRID UK - UNITED KINGDOM

09:50 **LS7a: Industrial Session: Grid Challenges** *Location: Hall 1*
Chair: Dr. Colin OATES, ALSTOM GRID, UNITED KINGDOM
Co-Chair: Dr. Mike BARNES, UNIVERSITY OF MANCHESTER, UNITED KINGDOM

09:50 **0966 - Technical Challenges of Realising Multi-terminal Networking with VSC**
WHITEHOUSE Robert - ALSTOM GRID UK - UNITED KINGDOM

10:10 **0967 - The challenges of connecting offshore windfarms in the North Sea**
CORBETT Joe - MAINSTREAM RENEWABLE POWER LTD. - IRELAND

10:30 **0968 - Potential use of VSC HVDC technology on the GB Transmission System'**
COVENTRY Paul - NATIONAL GRID - UNITED KINGDOM

09:50 **LS7b: Topic 15: Storage of Energy** *Location: Hall 11a*
Chair: Prof. Dr. Frede BLAABJERG, AALBORG UNIVERSITY, DENMARK
Co-Chair: M.Sc. Samuel ARAÚJO, UNIVERSITY OF KASSEL - KDEE, GERMANY

09:50 **0606 - Thermoelectric Power Generation: Properties, Application and novel TCAD simulation**
GOULD Chris - STAFFORDSHIRE UNIVERSITY - UNITED KINGDOM
SHAMMAS N.Y.A. - STAFFORDSHIRE UNIVERSITY - UNITED KINGDOM
GRAINGER S. - STAFFORDSHIRE UNIVERSITY - UNITED KINGDOM
TAYLOR I. - STAFFORDSHIRE UNIVERSITY - UNITED KINGDOM

10:10 **0803 - Power Loss Evaluation of Voltage Equalisation Circuit for Series-connected Supercapacitors Energy Storage**
KULSANGCHAROEN Ponggorn - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
KLUMPNER Christian - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
RASHED Mohamed - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
ASHER Greg - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

10:30 **0211 - Development of a Modular High-Power Converter System for Battery Energy Storage Systems**
THOMAS Stephan - RWTH AACHEN UNIVERSITY - GERMANY
STIENEKER Marco - RWTH AACHEN UNIVERSITY - GERMANY
DE DONCKER Rik W. - RWTH AACHEN UNIVERSITY - GERMANY

09:50 **LS7c: Topic 2: System Integration & Packaging, Reliability and Modelling** *Location: Hall 9*
Chair: Dr. Roman GRINBERG, ABB CORPORATE RESEARCH, SWITZERLAND
Co-Chair: Dr. Hervé MOREL, UNIVERSITE DE LYON, INSA LYON, CNRS, FRANCE

09:50 **0709 - Power Sandwich Industrial Drive with SiC JFETs**
JOSIFOVIC Ivan - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

POPOVIC-GERBER Jelena - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

FERREIRA Jan Abraham - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

10:10 **0293 - Complete Short Failure-Mode Properties and Comparison Based on IGBT Standard Packaging. Application to New Fault-Tolerant Inverter and Interleaved Chopper with Reduced Parts Count**

RICHARDEAU Frédéric - LAPLACE - UNIVERSITY OF TOULOUSE - FRANCE

DOU Zhifeng - LAPLACE - UNIVERSITY OF TOULOUSE - FRANCE

BLAQUIERE Jean-Marc - LAPLACE - UNIVERSITY OF TOULOUSE - FRANCE

SARRAUTE Emmanuel - LAPLACE - UNIVERSITY OF TOULOUSE - FRANCE

FLUMIAN Didier - LAPLACE - UNIVERSITY OF TOULOUSE - FRANCE

MOSSER Franck - LAPLACE - UNIVERSITY OF TOULOUSE - FRANCE

10:30 **0043 - Improved Characterization of the Magnetic Properties of Hexagonally Packed Wires**

ROSSMANITH Hans - UNIVERSITÄT ERLANGEN - GERMANY

ALBACH Manfred - UNIVERSITÄT ERLANGEN - GERMANY

PATZ Janina - UNIVERSITÄT ERLANGEN - GERMANY

STADLER Alexander - STS SPEZIAL TRANSFORMATOREN STOCKACH - GERMANY

09:50 **LS7d: Topic 4: Resonant converters Topologies for Induction Heating**

Location: Hall 10b

Chair: Prof. Dr. Enrique DEDE, UNIVERSITY OF VALENCIA, SPAIN

Co-Chair: Dr. Felix FRANCK, OSRAM GMBH, GERMANY

09:50 **0241 - A novel class E RF self-oscillating topology for induction heating applications**

SARNAGO Héctor - UNIVERSITY OF ZARAGOZA - SPAIN

MEDIANO Arturo - UNIVERSITY OF ZARAGOZA - SPAIN

PALACIOS Daniel - BOSCH AND SIEMENS HOME APPLIANCES GROUP - SPAIN

SANTOLARIA Alfonso - BOSCH AND SIEMENS HOME APPLIANCES GROUP - SPAIN

10:10 **0752 - A New Multiple Coils Topology For Domestic Induction Cooking System**

SAOUDI Magdy - UNIVERSITY OF ZARAGOZA - SPAIN

PUYAL Diego - BOSCH AND SIEMENS HOME APPLIANCES GROUP - SPAIN

ANTON Daniel - BOSCH AND SIEMENS HOME APPLIANCES GROUP - SPAIN

MEDIANO Arturo - UNIVERSITY OF ZARAGOZA - SPAIN

SARNAGO Héctor - UNIZAR - SPAIN

10:30 **0403 - A New Topology of Direct AC to AC Converter with Soft-Switching Based on a MERS Pulse Link Concept**

OTANI Yohei - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

ISOBE Takanori - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

SHIMADA Ryuichi - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

09:50 **LS7e: Topic 10: Motor Design Optimisation**

Location: Hall 6

Chair: Prof. Dr. Yves PERRIARD, EPFL-IMT-LAI, SWITZERLAND

Co-Chair: Prof. Dr. Osamu MIYASHITA, TOKYO DENKI UNIVERSITY, JAPAN

09:50 **0249 - Design Rules for Permanent Magnet Synchronous Machines with Tooth-Coils for Sensorless Control Up to Overload Range**

EILENBERGER Andreas - TECHNICAL UNIVERSITY OF VIENNA - AUSTRIA

10:10 **0136 - The Accuracy of the Classical Machine Phasor Diagram and On-Line Measurements for Permanent Magnet Machines**

MORTON Graham - UNIVERSITY OF GLASGOW - UNITED KINGDOM

COSSAR Calum - UNIVERSITY OF GLASGOW - UNITED KINGDOM

10:30 **0663 - Optimisation of the Design Parameters of an Asymmetric Brushless DC Motor for Cogging Torque Minimisation**

LEFLEY Paul - UNIVERSITY OF LEICESTER - UNITED KINGDOM

PETKOVSKA Lidija - THE SS. CYRIL AND METHODIUS UNIVERSITY'S - MACEDONIA

CVETKOVSKI Goga - SS. CYRIL AND METHODIUS UNIVERSITY - MACEDONIA

09:50 **LS7f: Topic 13: Energy Efficiency, Energy Savings Issues (II)**

Location: Hall 10a

Chair: Prof. Dr. Walter SCHUMACHER, TU BRAUNSCHWEIG, GERMANY
Co-Chair: Prof. Augusto DI NAPOLI, UNIVERSITÀ ROMATRE, ITALY

09:50 **0418 - Design Optimization Methodology for Power Converters based on Global Energy Requirement Criteria. Application to a DC-DC Flyback Structure**

JAOUEN Cédric - CEA-INES - FRANCE

MULTON Bernard - SATIE ENS CACHAN - FRANCE

BARRUEL Franck - CEA-INES - FRANCE

10:10 **0481 - A Method for Controlling Three-Phase-Laminated-Core Variable Inductor Applied to Reactive Power Compensator by Voltage Reversible Chopper**

ABE Yoshiaki - TOHOKU UNIVERSITY - JAPAN

NAKAMURA Kenji - TOHOKU UNIVERSITY - JAPAN

GOTO Hiroki - TOHOKU UNIVERSITY - JAPAN

OOHINATA Takashi - TOHOKU ELECTRIC POWER CO. INC. - JAPAN

ARIMATSU Kenji - TOHOKU ELECTRIC POWER CO. INC. - JAPAN

SAKAMOTO Kunio - TOHOKU ELECTRIC POWER CO. INC. - JAPAN

ICHINOKURA Osamu - TOHOKU UNIVERSITY - JAPAN

10:30 **0755 - A novel method for collective dimming of high intensity discharge lamps**

CHENG Miaomiao - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

ILHAMI Bin Mustapha - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

SHIMADA Ryuichi - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

09:50 **LS7g: Topic 18: Electric Propulsion Systems for Electrified Vehicles**

Location: Hall 11b

Chair: Prof. Dr. Andrea VEZZINI, BERN UNIVERSITY OF APPLIED SCIENCES, SWITZERLAND
Co-Chair: Ing. Luca SGARBOSSA, UNIVERSITY OF PADOVA, ITALY

09:50 **0160 - Decrease of asynchronous rotation-frequency noise and vibration caused by electromagnetic force inside the motor for a hybrid-vehicle**

ARATA Masanori - TOSHIBA - JAPAN

MOCHIZUKI Motoyasu - TOSHIBA - JAPAN

ARAKI Takashi - TOSHIBA INDUSTRIAL PRODUCTS MANUFACTURING CO. - JAPAN

HIRANO Yasuo - TOSHIBA INDUSTRIAL PRODUCTS MANUFACTURING CO. - JAPAN

MATSUBARA Masakatsu - TOSHIBA INDUSTRIAL PRODUCTS MANUFACTURING CO. - JAPAN

10:10 **0409 - Robust Implementation of High Speed Sensorless Control for a High Volume Automotive Electric Steering Application**

SZABO Adrian - TRW AUTOMOTIVE - UNITED KINGDOM

WILLIAMS Connel - TRW AUTOMOTIVE - UNITED KINGDOM

10:30 **0212 - Electrical Gearbox Equivalent by means of Dynamic Machine Operation**

GERRITS Thomas - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS
WIJNANDS Korneel - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS
PAULIDES Johan - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS
DUARTE Jorge - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS

11:10 **LS8a: Industrial Session: Power Electronics Solutions for the Grid**

Location: Hall 1

Chair: Dr. Paul COVENTRY, NATIONAL GRID, UNITED KINGDOM
Co-Chair: Joe CORBETT, MAINSTREAM RENEWABLE POWER LTD., IRELAND

11:10 0969 - VSC HVDC - past, present and future

NORRGA Staffan - ABB AB, CORPORATE RESEARCH - SWEDEN

11:30 0970 - Modular Multilevel Converters and HVDC/FACTS: a success story

KNAAK Hans-Joachim - SIEMENS AG - GERMANY

11:50 0971 - The Tres Amigas Project

REYNOLDS Mark - POWER ENGINEERS - UNITED STATES OF AMERICA

11:10 **LS8b: Topic 14: Testing of the generator converters and wave power generation**

Location: Hall 11a

Chair: Dr. Jouko NIIRANEN, ABB OY, FINLAND
Co-Chair: Prof. Dr. Antoni SUDRIA, IREC, SPAIN

11:10 0398 - Laboratory tests of linear electric machines for wave energy applications with emulation of wave energy converters and sea waves

BLANCO Marcos - CIEMAT - SPAIN

LAFOZ Marcos - CIEMAT - SPAIN

GARCÍA-TABARÉS Luis - CIEMAT - SPAIN

11:30 0294 - LIFETIME INVESTIGATION OF HIGH POWER IGBT MODULES

DUE Jens - AALBORG UNIVERSITY - DENMARK

MUNK-NIELSEN Stig - AALBORG UNIVERSITY - DENMARK

NIELSEN Rasmus - AALBORG UNIVERSITY - DENMARK

11:50 0585 - Full-power converter based test bench for low voltage ride-through testing of wind turbine converters

PÖLLÄNEN Riku - THE SWITCH - FINLAND

KANKAINEN Lasse - THE SWITCH - FINLAND

PÄÄKKÖNEN Mikko - THE SWITCH - FINLAND

OLLILA Jaakko - VACON PLC - FINLAND

STRANDBERG Stefan - VACON PLC - FINLAND

11:10 **LS8d: Topic 4: Soft Switching Converters (I)**

Location: Hall 10b

Chair: Prof. Dr. Ir. Alex VAN DEN BOSSCHE, UGENT, BELGIUM
Co-Chair: Ing. Soren CHRISTENSEN, BANG & OLUFSEN A/S, DENMARK

11:10 0301 - Dual Active Bridge Modulation with Complete Zero Voltage Switching Taking Resonant Transitions into Account

GUIDI Giuseppe - YOKOHAMA NATIONAL UNIVERSITY - JAPAN

KAWAMURA Atsuo - YOKOHAMA NATIONAL UNIVERSITY - JAPAN

SASAKI Yuji - IHI CORPORATION - JAPAN

IMAKUBO Tomofumi - IHI CORPORATION - JAPAN

11:30 0081 - Efficiency Comparison between Motor Friendly Hard and Soft Switching Inverters

KEDARISSETTI Jayalakshmi - TECHNICAL UNIVERSITY DARMSTADT - GERMANY

MUTSCHLER Peter - TECHNICAL UNIVERSITY DARMSTADT - GERMANY

11:50 **0360 - ZVS Three-Level Phase-Shift High Step-Down DC/DC Converter with Two Transformers**

LI Peng - ZHEJIANG UNIVERSITY - CHINA

LI Wuhua - ZHEJIANG UNIVERSITY - CHINA

HE Xiangning - ZHEJIANG UNIVERSITY - CHINA

11:10 **LS8e: Topic 10: High Efficiency Motor Design**

Location: Hall 6

Chair: Prof. Eric MONMASSON, UNIVERSITY OF CERGY-PONTOISE, FRANCE

Co-Chair: Prof. Mario CACCIATO, DIEEI - UNIVERSITY OF CATANIA, ITALY

11:10 **0245 - A New Structure of 12Slot-10Pole Field-Excitation Flux Switching Synchronous Machine for Hybrid Electric Vehicles**

SULAIMAN Erwan - NAGOYA INSTITUTE OF TECHNOLOGY - JAPAN

KOSAKA Takashi - NAGOYA INSTITUTE OF TECHNOLOGY - JAPAN

MATSUI Nobuyuki - NAGOYA INSTITUTE OF TECHNOLOGY - JAPAN

11:30 **0277 - First Experimental Results of Highly Efficient PMSM for HEV**

TAUS-BETI Lorenz - TU-BERLIN - GERMANY

SCHAEFER Uwe - TU-BERLIN - GERMANY

11:50 **0809 - Novel bearingless slice motor design with four concentrated coils featuring a unique operational behavior**

GRUBER Wolfgang - JOHANNES KEPLER UNIVERSITY LINZ - AUSTRIA

BRIEWASSER Wolfgang - JOHANNES KEPLER UNIVERSITY LINZ - AUSTRIA

AMRHEIN Wolfgang - ACCM GMBH - AUSTRIA

11:10 **LS8f: Topic 19: Rail, Marine and On-Board Energy Management**

Location: Hall 10a

Chair: Prof. Dr. Marcel JUFER, EPFL, SWITZERLAND

Co-Chair: Dr. Drazen DUJIC, ABB CORPORATE RESEARCH, SWITZERLAND

11:10 **0023 - Laboratory Scale Prototype of a Power Electronic Transformer for Traction Applications**

DUJIC Drazen - ABB CORPORATE RESEARCH - SWITZERLAND

MESTER Akos - ABB SWITZERLAND LTD - SWITZERLAND

CHAUDHURI Toufann - ABB SECHERON S.A. - SWITZERLAND

COCCIA Antonio - FORMERLY WITH ABB - SWITZERLAND

CANALES Francisco - ABB CORPORATE RESEARCH - SWITZERLAND

STEINKE Juergen - ABB SWITZERLAND LTD - SWITZERLAND

11:30 **0405 - The Use of Real Time Digital Simulation and Hardware in the Loop to De-Risk Novel Control Algorithms**

LODDICK Sean - CONVERTEAM - UNITED KINGDOM

MUPAMBIREYI Ushe - CONVERTEAM - UNITED KINGDOM

BOOTH Campbell - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

ROSCOE Andrew - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

BLAIR Steven - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

LI Xinyao - UNIVERSITY OF STRATHCLYDE - UNITED KINGDOM

WATSON Jim - UK MINISTRY OF DEFENCE - UNITED KINGDOM

DAFFEY Kevin - UK MINISTRY OF DEFENCE - UNITED KINGDOM

11:50 **0697 - Design and Supervision Strategies for Embedded Electrical Power Systems Equipped with Energy Storage Devices**

SAUDEMONT Christophe - L2EP LILLE / ECOLE DES HAUTES ETUDES D'INGENIEUR - FRANCE

BREBAN Stefan - L2EP LILLE / ECOLE DES HAUTES ETUDES D'INGÉNIEUR - FRANCE

MOLLET Fabien - ECOLE DES HAUTES ETUDES D'INGÉNIEUR - FRANCE

MEURET Régis - HISPANO-SUIZA - FRANCE

ROBYNS Benoît - L2EP LILLE / ECOLE DES HAUTES ETUDES D'INGÉNIEUR - FRANCE

11:10 LS8g: Topic 3: Power System Integration

Location: Hall 11b

Chair: Dr. Daniel SIEMASZKO, CERN, SWITZERLAND

Co-Chair: Dr. Hector ZELAYA-DE LA PARRA, ABB CORPORATE RESEARCH, SWEDEN

11:10 0103 - EMC Modelling of Drives for Aircraft Applications: Modelling Process and Optimisation of EMI Filters

TOURE Baïdy - G2ELAB/LIEBHERR AEROSPACE - FRANCE

SCHANEN Jean-Luc - G2ELAB - FRANCE

GERBAUD Laurent - G2ELAB - FRANCE

MEYNARD Thierry - LAPLACE TOULOUSE - FRANCE

CARRAO Nicolas - LHOQ GRENOBLE INSTITUTE OF TECHNOLOGY - FRANCE

CARAYON Jean pierre - LIEBHERR AEROSPACE TOULOUSE - FRANCE

11:30 0740 - EMC Behavior of PWM Inverter structure based on Coupled Interleaved Cells using Intercell Transformers

GAUTIER Cyrille - SATIE ENS CACHAN - FRANCE

ADAM Fabien - SATIE ENS CACHAN - FRANCE

LABOURE Eric - LGEP - FRANCE

REVOL Bertrand - SATIE ENS CACHAN - FRANCE

11:50 0826 - New Type LCCT-Z-Source Inverters

ADAMOWICZ Marek - GDANSK UNIVERSITY OF TECHNOLOGY - POLAND

GUZINSKI Jaroslaw - GDANSK UNIVERSITY OF TECHNOLOGY - POLAND

ABU-RUB Haitham - TEXAS A&M UNIVERSITY AT QATAR - QATAR

PENG Fang Zheng - MICHIGAN STATE UNIVERSITY - UNITED STATES OF AMERICA

STRZELECKI Ryszard - ELECTROTECHNICAL INSTITUTE WARSAW - POLAND

12:20 LS9a: Topic 16: Active Filtering and Advanced Grid Side Converter Control

Location: Hall 1

Chair: Dr. Sergej KALASCHNIKOW, DANFOSS, UNITED STATES OF AMERICA

Co-Chair: Dr. Ramon BLASCO-GIMENEZ, UNIVERSIDAD POLITECNICA DE VALENCIA, SPAIN

12:20 0284 - Modified four leg DSTATCOM Topology for Compensation of Unbalanced and Non linear loads in Three Phase Four wire System

GEDDADA Nagesh - IIT MADRAS - INDIA

KARANKI Srinivas Bhaskar - IIT MADRAS - INDIA

MISHRA Mahesh Kumar - IIT MADRAS - INDIA

B Kalyan Kumar - IIT MADRAS - INDIA

12:40 0465 - Simulations of a Current-Source Shunt Active Power Filter with Carrier-Based PWM and Periodic Sampling Modulation Techniques

EXPOSTO Bruno - UNIVERSITY OF MINHO - PORTUGAL

AFONSO João - UNIVERSITY OF MINHO - PORTUGAL

CARNEIRO Helder - UNIVERSITY OF MINHO - PORTUGAL

COUTO Carlos - UNIVERSITY OF MINHO - PORTUGAL

PINTO Gabriel - UNIVERSIDADEDOMINHO - PORTUGAL

13:00 0411 - Mitigation of Unbalance Voltage Sag with Phase Jumps by UPQC with Minimum Real Power Injection

G Siva Kumar - IIT MADRAS - INDIA

B Kalyan Kumar - IIT MADRAS - INDIA

MISHRA Mahesh K - IIT MADRAS - INDIA

12:20 **LS9b: Topic 14: System design of permanent magnet generator converters**

Location: Hall 11a

Chair: Prof. William DRURY, UNIVERSITY OF BRISTOL, UNITED KINGDOM

Co-Chair: Ing. Carlos CALLEJA, IKERLAN-IK4, SPAIN

12:20 0886 - Six-phase PMSG wind energy conversion system based on medium-voltage multilevel converter

DURAN Mario - UNIVERSITY OF MALAGA - SPAIN

KOURO Samir - UNIVERSIDAD TECNICA FEDERICO SANTA MARIA - CHILE

WU Bin - RYERSON UNIVERSITY - CANADA

LEVI Emil - LIVERPOOL JOHN MOORES UNIVERSITY - UNITED KINGDOM

BARRERO Federico - UNIVERSITY OF SEVILLE - SPAIN

ALEPUZ Salvador - UNIVERSITAT POLITECNICA DE CATALUNYA - SPAIN

12:40 0681 - Optimised Power Converter for Multi MW Direct Drive PM Wind Turbines

JONES Rod - SIEMENS - UNITED KINGDOM

WAITE Philip - SIEMENS - UNITED KINGDOM

13:00 0331 - ON THE DESIGN CONSIDERATIONS OF A 1.5 MVA WIND ENERGY SYSTEM

MESE Erkan - YILDIZ TECHNICAL UNIVERSITY - TURKEY

ATALAN Mertcan - YILDIZ TECHNICAL UNIVERSITY - TURKEY

12:20 **LS9c: Topic 22: Education in Electrical Engineering**

Location: Hall 9

Chair: Prof. Dr. Ir. Pavol BAUER, TU DELFT, NETHERLANDS

Co-Chair: Dr. Ir. Jan CAPPELLE, KAHO SINT-LIEVEN UNIVERSITY COLLEGE, BELGIUM

12:20 0396 - Development of a grid connected micro wind generator. A practical activity for the course on electric generation with wind energy

LAFOZ Marcos - CIEMAT - SPAIN

SANCHEZ Jose M. - ETSII - SPAIN

DIAZ Maria Eugenia - ETSII - SPAIN

VEGANZONES Carlos - ETSII - SPAIN

12:40 0402 - Drive systems with torsional load: versatile low-cost educational laboratory set-up

SAEY Philippe - KAHO SINT-LIEVEN - ASSOCIATIE K.U. LEUVEN - BELGIUM

CAUWE Xavier - ARCELORMITTALGENT - BELGIUM

DECONINCK Geert - KULEUVEN - BELGIUM

13:00 0944 - Teaching drive control using Energetic Macroscopic Representation – Summer schools

BOUSCAYROL Alain - UNIVERSITY LILLE1 - FRANCE

12:20 **LS9d: Topic 4: Soft Switching Converters (II)**

Location: Hall 10b

Chair: Dr. Stig MUNK-NIELSEN, AALBORG UNIVERSITY, DENMARK

Co-Chair: Prof. Dr. Sibylle DIECKERHOFF, TU BERLIN, GERMANY

12:20 0768 - Contactless power supply system with resonant circuit parameter change compensation

KALISIAK Stanislaw - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY - POLAND

MARCINEK Marcin - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY - POLAND

HOLUB Marcin - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY - POLAND

PALKA Ryszard - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY - POLAND

12:40 **0652 - A Power Converter Topology for High Efficiency DC Magnet Power Supplies**

PHOLBOON Seksak - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

CLARE Jon - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

WHEELER Patrick - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

KHWANON Sudarat - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

TEERAKAWANICH Nithiphat - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

PHOTONG Chonlatee - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

13:00 **0256 - Design of 10 kW resonant push-pull DC-DC converter for Solid Oxide Fuel Cell applications**

VÄISÄNEN Vesa - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

RIIPINEN Tomi - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

HILTUNEN Jani - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

SILVENTOINEN Pertti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

12:20 **LS9e: Topic 10: Switched Reluctance Machines**

Location: Hall 6

Chair: Prof. Domenico CASADEI, UNIVERSITY OF BOLOGNA, ITALY

Co-Chair: Prof. Dr. Rik DE DONCKER, RWTH AACHEN UNIVERSITY, GERMANY

12:20 **0078 - Thermal Modeling of a High Speed Switched Reluctance Machine with Axial Air-gap Flow for Vacuum Cleaners**

BRAUER Helge J. - RWTH AACHEN UNIVERSITY - GERMANY

DE DONCKER Rik W. - ISEA - RWTH AACHEN UNIVERSITY - GERMANY

12:40 **0659 - Modelling and control of one bearingless 8-6 switched reluctance motor with single layer of winding structure**

LI Chen - DRESDEN UNIVERSITY OF TECHNOLOGY - GERMANY

WILFRIED Hofmann - TU DRESDEN - GERMANY

13:00 **0679 - Modeling of Flux Reversal Machines for direct drive applications**

PELLEGRINO Gianmario - POLITECNICO DI TORINO - ITALY

GERADA Christopher - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

12:20 **LS9f: Topic 21: Energy Conversion and Conditioning Technologies in Physics Research and Related Applications**

Location: Hall 10a

Chair: Dr. Frederick BORDRY, CERN, SWITZERLAND

Co-Chair: Prof. Alfred RUFER, EPFL, SWITZERLAND

12:20 **0169 - Self-Optimizing, High Dynamic Control of Magnet Power Supplies for Particle Accelerators**

KE Xinhua - UNIVERSITY OF APPLIED SCIENCES NORTHWESTERN CH - SWITZERLAND

JAECKLE Hans - PAUL SCHERRER INSTITUTE - SWITZERLAND

JENNI Felix - UNIVERSITY OF APPLIED SCIENCES NORTHWESTERN CH - SWITZERLAND

12:40 **0201 - A novel approach for a Marx topology with bipolar output voltages for Dielectric Barrier Discharges**

TASTEKIN David - UNIVERSITÄT STUTTGART - GERMANY

BLANK Frederic - UNIVERSITÄT STUTTGART - GERMANY

ROTH-STIELOW Jörg - UNIVERSITÄT STUTTGART - GERMANY

LUNK Achim - UNIVERSITÄT STUTTGART - GERMANY

13:00 **0224 - 2MW Active Bouncer Converter Design for Long Pulse Klystron Modulators**

12:20 **LS9g: Topic 9: Motion Control, Robotics, Special Drives, Haptics**

Location: Hall 11b

Chair: Prof. Dr. Betty SEMAIL, UNIVERSITY LILLE 1, FRANCE
Co-Chair: Dipl.-Ing. Ingo PLETSCHE, THYSSENKRUPP AUFZUGSWERKE, GERMANY

12:20 **0099 - Predictive Control of a Permanent Magnet Synchronous Machine based on Real-Time Dynamic Optimization**

STUMPER Jean-François - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY
DÖTLINGER Alexander - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY
JUNG Janos - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY
KENNEL Ralph - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

12:40 **0125 - New Approaches for Contactless Power Transmission Systems Integrated in PM Motor Drives Transferring Electrical Energy to Rotating Loads**

REINHARD Markus - SIEMENS AG - GERMANY
SPINDLER Carsten - SIEMENS AG - GERMANY
SCHUER Torsten - SIEMENS AG - GERMANY
DENK Joachim - SIEMENS AG - GERMANY
BIRK Veronika - SIEMENS AG - GERMANY

13:00 **0242 - Reduction of the Number of Power Amplifiers for an Advanced Single-stage Planar Actuator**

DRIESSEN Anton - PRODRIVE - NETHERLANDS
WIJNANDS Korneel - PRODRIVE - NETHERLANDS
DUARTE Jorge - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS
ROES Maurice - EINDHOVEN UNIVERSITY OF TECHNOLOGY - NETHERLANDS

14:10 **DS3a: Topic 2: Passive Components, System Integration & Packaging**

Location: Hall 3

Chair: Dr. Ralf SCHMIDT, SEMIKRON ELEKTRONIK GMBH & CO. KG, GERMANY
Co-Chair:

0030 - Current Distribution in Copper Coils with Parallel Windings

LEICHT Anne-Christine - FRIEDRICH-ALEXANDER-UNIVERSITY OF ERLANGEN - GERMANY
SPANG Matthias - FRIEDRICH-ALEXANDER-UNIVERSITY OF ERLANGEN - GERMANY
KUEBRICH Daniel - FRIEDRICH-ALEXANDER-UNIVERSITY OF ERLANGEN - GERMANY
ALBACH Manfred - FRIEDRICH-ALEXANDER-UNIVERSITY OF ERLANGEN - GERMANY

0122 - Impact of Solder Fatigue on Module Lifetime in Power Cycling Tests

SCHEUERMANN Uwe - SEMIKRON ELEKTRONIK GMBH & CO. KG - GERMANY
SCHMIDT Ralf - SEMIKRON ELEKTRONIK GMBH & CO. KG - GERMANY

0132 - Improved Thermal Design of a High Frequency Power Transformer

STADLER Alexander - STS SPEZIAL TRANSFORMATOREN STOCKACH - GERMANY
GULDEN Christof - STS SPEZIAL TRANSFORMATOREN STOCKACH - GERMANY

0134 - Air-Cooling Optimization at System Level

GRADINGER Thomas - ABB SWITZERLAND LTD. - SWITZERLAND

0153 - Effect of material technologies on equivalent structural parasitic capacitance of high-voltage cascade rectifier

WANG Jianing - TUD - NETHERLANDS
LUERKENS Peter - PFA - GERMANY

DE HAAN Sjoerd - TUD - NETHERLANDS
VERWEIJ Martin - TUD - NETHERLANDS
FERREIRA Bram - TUD - NETHERLANDS

0208 - Half-Bridge Power Device Gate Driver Circuit with Isolation using Integrated Magnetic Component and Carrier Signal Phase Switching

MCNEILL Neville - UNIVERSITY OF BRISTOL - UNITED KINGDOM
HOLLIDAY Derrick - UNIVERSITY OF BRISTOL - UNITED KINGDOM
MELLOR Philip - UNIVERSITY OF BRISTOL - UNITED KINGDOM

0239 - Diffusion Soldering for Automotive Power MOSFETs offers the first 100% leadfree die attach

PUERSCHER Marco - INFINEON TECHNOLOGIES AG - GERMANY
ROESCHLAU Klaus - INFINEON TECHNOLOGIES AG - GERMANY

0383 - A Coffin-Manson Model to Predict TRIAC Solder Joints Fatigue during Power Cycling

JACQUES Sebastien - LMP - FRANCE
CALDEIRA Adelphe - LMP - FRANCE
BATUT Nathalie - LMP - FRANCE
SCHELLMANN Ambroise - LMP - FRANCE
LEROY René - LMR, TOURS UNIVERSITY - FRANCE
GONTHIER Laurent - STMICROELECTRONICS - FRANCE

0428 - Current Distribution in High Power Laminated Busbars

BRYANT Angus - CONVERTEAM - UNITED KINGDOM
VADLAPATI Kiran Kumar - CONVERTEAM - UNITED KINGDOM
STARKEY Jonathan - CONVERTEAM - UNITED KINGDOM
GOLDNEY Andy - CONVERTEAM - UNITED KINGDOM
KANDILIDIS Stefanos - CONVERTEAM - UNITED KINGDOM
HINCHLEY David - CONVERTEAM - UNITED KINGDOM

0429 - Gatecard Reliability Prediction Analysis

SOMESHA Sowmya - CONVERTEAM - UNITED KINGDOM
LODDICK Sean - CONVERTEAM - UNITED KINGDOM
LEE David - CONVERTEAM - UNITED KINGDOM

0433 - Design and characterization of planar integrated passive component for power converters

MAO Sajun - GE - CHINA

0501 - Design and Analysis of a Bus Bar Structure for a Medium Voltage Inverter

ANDO Masato - TOKYO METROPOLITAN UNIVERSITY - JAPAN
WADA Keiji - TOKYO METROPOLITAN UNIVERSITY - JAPAN
TAKAO Kazuto - TOSHIBA - JAPAN
KANAI Takeo - TMEIC - JAPAN
NISHIZAWA Shinichi - NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE - JAPAN
OHASHI Hiromichi - NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE - JAPAN

0699 - Planar layer permeability measurement setup

LOEF Christoph - RWTH AACHEN UNIVERSITY - GERMANY
WAFFENSCHMIDT Eberhard - PHILIPS RESEARCH LABORATORIES AACHEN - GERMANY

DE DONCKER Rik W. - RWTH AACHEN UNIVERSITY - GERMANY

0715 - 3D integration of a three-phase bi-directional power switch

KASSA Adane Solomon - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

CASTELLAZZI Alberto - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

TRENTIN Andrew - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

0765 - Liquid Cooling methods for power electronics in an automotive environment

BAUMANN Mathias - DAIMLER AG - GERMANY

WONDRAK Wolfgang - DAIMLER AG - GERMANY

LUTZ Josef - TU CHEMNITZ - GERMANY

0861 - Development of ageing models of capacitors for application to lifetime simulation and state of health monitoring

MASSIOT Gregor - EADS FRANCE IW - FRANCE

0946 - Impact of source metallization ageing on thermo-mechanical characteristics of a vertical power device

MARCAULT Emmanuel - LAAS-CNRS - FRANCE

BREIL Marie - LAAS-CNRS - FRANCE

BOURENNANE Abdelhakim - LAAS-CNRS - FRANCE

TOUNSI Patrick - LAAS-CNRS - FRANCE

MARTINEAU Donatien - CEMES-CNRS - FRANCE

DUPUY Philippe - FREESCALE SEMICONDUCTOR - FRANCE

14:10 0607 - Lifetime calculation for power modules, application and theory of models and counting methods

MAINKA Krzysztof - INFINEON TECHNOLOGIES AG - GERMANY

THOBEN Markus - INFINEON TECHNOLOGIES AG - GERMANY

SCHILLING Oliver - INFINEON TECHNOLOGIES AG - GERMANY

14:10 **DS3b: Topic 3: Power System Integration**

Location: Hall 3

Chair: Ing. Pierre ALOISI, LAAS/CNRS, FRANCE

Co-Chair:

0063 - Electro-thermal modelling of three phase inverter

HUANG Hui - UNIVERSITY OF WARWICK - UNITED KINGDOM

MAWBY Philip - UNIVERSITY OF WARWICK - UNITED KINGDOM

BRYANT Angus - UNIVERSITY OF WARWICK - UNITED KINGDOM

0089 - Control Scheme of Three-level H-bridge Converter for Interfacing Between Renewable Energy Resources and AC Grid

POURESMAEIL Edris - CITCEA-UPC - SPAIN

MONTESINOS-MIRACLE Daniel - CITCEA-UPC - SPAIN

GOMIS-BELLMUNT Oriol - CITCEA-UPC - SPAIN

0236 - Influence and benefits of stray magnetic couplings in EMC filtering

DE OLIVEIRA Thomas - G2ELAB - FRANCE

SCHANEN Jean-luc - G2ELAB - FRANCE

GUICHON Jean-Michel - G2ELAB - FRANCE

0336 - Three-dimensional Parasitics Cancellation in EMI Filters with Power Sandwich Construction

GONG Xun - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

FERREIRA J.A - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

0339 - Grid Impact of Fast Charging of Electric Vehicles

ZELAYA-DE LA PARRA Hector - ABB CORPORATE RESEARCH - SWEDEN

YUNUS Kalid - ABB CORPORATE RESEARCH - SWEDEN

REZA Muhamad - ABB CORPORATE RESEARCH - SWEDEN

SRIVASTAVA Kailash - ABB CORPORATE RESEARCH - SWEDEN

0375 - Transient Stability Analysis of Inverter-Interfaced Distributed Generators in a Microgrid System

ANDRADE Fabio - UPC - SPAIN

ROMERAL Luis - UPC - SPAIN

CUSIDÓ Jordi - CTM CENTRE TECNOLÒGIC - SPAIN

0524 - Reliability Models Applied to a System of Power Converters in Particle Accelerators

SIEMASZKO Daniel - CERN - SWITZERLAND

SPEISER Michel - EPFL - SWITZERLAND

PITTET Serge - CERN - SWITZERLAND

0538 - Voltage sag ride-through of PMSG wind turbines using droop control stabilization

JUNYENT-FERRE Adria - CITCEA-UPC - SPAIN

GOMIS-BELLMUNT Oriol - IREC - CITCEA - SPAIN

PRIETO-ARAUJO Eduardo - CITCEA-UPC - SPAIN

BIANCHI Fernando - IREC - SPAIN

0621 - A Review of Parallel Operation of Active Power Filters in the Distributed Generation System

KHADEM MD Shafiuzzaman Khan - DUBLIN INSTITUTE OF TECHNOLOGY - IRELAND

BASU Malabika - DUBLIN INSTITUTE OF TECHNOLOGY - IRELAND

CONLON Michael - DUBLIN INSTITUTE OF TECHNOLOGY - IRELAND

0815 - System Integration Of A Variable Speed Generator Set: Challenges And System Design

GUTIERREZ ALCARAZ Juan Marcelo - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

DE HAAN S.W.H. - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

FERREIRA J.A. - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

0825 - FlePs: a power interface for Power Hardware In the Loop

BENIGNI Andrea - RWTH AACHEN UNIVERSITY - GERMANY

HELMEDAG Alexander - RWTH AACHEN UNIVERSITY - GERMANY

ABDALRAHMAN Adil - ABB POWER SYSTEM - SWEDEN

PILATOWICZ Grzegorz - RWTH AACHEN UNIVERSITY - GERMANY

MONTI Antonello - RWTH AACHEN UNIVERSITY - GERMANY

0841 - Minimizing temporal simulation time to estimate common mode disturbances

LABROUSSE Denis - SATIE ENS CACHAN - FRANCE

REVOL Bertrand - SATIE ENS CACHAN - FRANCE

COSTA François - SATIE ENS CACHAN - FRANCE

GAUTIER Cyrille - SATIE ENS CACHAN - FRANCE

0872 - Optimum Input-Filter-Capacitor Sizing for Fuel-Cell Based Single-Phase Inverter for Current-Ripple Mitigation

MAZUMDER Sudip - UNIVERSITY OF ILLINOIS, CHICAGO - UNITED STATES OF AMERICA

0931 - Motor Drive Common-Mode EMI Reduction by Passive Noise Cancellation

SUN Jian - RENSSLAER POLYTECHNIC INSTITUTE - UNITED STATES OF AMERICA

14:10 **DS3c: Topic 4: Soft Switching Converters and Control**

Location: Hall 3

Chair: Dr. Todor FILCHEV, HIMAG SOLUTIONS LIMITED, UNITED KINGDOM
Co-Chair:

0016 - A Design Methodology of Resonant LLC DC-DC Converter

ABRAMOVITZ Alexander - UNIVERSITY OF CALIFORNIA, IRVINE - UNITED STATES OF AMERICA

BRONSHTEIN Svetlana - SAMI SHAMOON COLLEGE OF ENGINEERING - ISRAEL

0182 - Comparison of Resonant LLC and LCC Converters for Low-Profile Applications

PAWELLEK Alexander - UNIVERSITY ERLANGEN - GERMANY

DUERBAUM Thomas - UNIVERSITY ERLANGEN - GERMANY

OEDER Christian - UNIVERSITY ERLANGEN - GERMANY

0304 - A New High Step-Up Voltage Ratio Soft Switching PWM Boost DC-DC Power Converter with Edge Resonant Switched Capacitor Modular

MISHIMA Tomokazu - KOBE UNIVERSITY - JAPAN

TAKEUCHI Yujiro - KOBE UNIVERSITY - JAPAN

NAKAOKA Mutsuo - YAMAGUCHI UNIVERSITY - JAPAN

0307 - Thermal-Electrical Modeling and Simulation of Resonantly Operated DC-DC Converters Based on Extended Describing Function Method

CAO Zhiyu - PADERBORN UNIVERSITY - GERMANY

LV Jianxun - BEIHANG UNIVERSITY - CHINA

FROEHLEKE Norbert - PADERBORN UNIVERSITY - GERMANY

BOECKER Joachim - PADERBORN UNIVERSITY - GERMANY

YUAN Haiwen - BEIHANG UNIVERSITY - CHINA

0311 - A Current Fed Multi-resonant Converter with Extended Voltage Regulation Range

LI Donghao - XI'AN JIAOTONG UNIVERSITY - CHINA

LIU Bo - XI'AN JIAOTONG UNIVERSITY - CHINA

YUAN Bo - ANALOG DEVICES, INC - CHINA

YANG Xu - XI'AN JIAOTONG UNIVERSITY - CHINA

HUANG Qingyi - ANALOG DEVICES, INC - CHINA

ZHAI Jerry - ANALOG DEVICES, INC - CHINA

0318 - Soft Switching Three Level Inverter with Passive Snubber Circuit (S3L Inverter)

GEKELER Manfred W. - HTWG KONSTANZ UNIVERSITY OF APPLIED SCIENCES - GERMANY

0421 - Resonant Inverter with a Variable-Frequency Asymmetrical Voltage-Cancellation Control for Low Q-Factor Loads in Induction Cooking

YACHIANGKAM Samart - KING MONGKUT'S UNIVERSITY OF TECHNOLOGY THONBURI - THAILAND

0422 - A Soft Switching Class D Current Source Inverter for Induction Heating with Non-Ferromagnetic Load

YACHIANGKAM Samart - KING MONGKUT'S UNIVERSITY OF TECHNOLOGY THONBURI - THAILAND

0534 - New resonant inverter topology with active energy recovery in PDM mode for DBD plasma reactor supply

JAKUBOWSKI Tomasz - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY, SZCZECIN - POLAND

KALISIAK Stanislaw - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY, SZCZECIN - POLAND
HOLUB Marcin - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY, SZCZECIN - POLAND
PALKA Ryszard - WEST POMERANIAN UNIVERSITY OF TECHNOLOGY, SZCZECIN - POLAND
BORKOWSKI Tadeusz - MARITIME ACADEMY, SZCZECIN - POLAND
MYSKOW Jaroslaw - MARITIME ACADEMY, SZCZECIN - POLAND

0541 - Medium frequency transformer in resonant switching dc/dc-converters for railway applications

HOFFMANN Holger - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY
PIEPENBREIER Bernhard - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

0675 - Heating Method for Ferromagnetic Metal by Power Factor Control

KUBOTA Sachio - TOBA NATIONAL COLLEGE OF MARITIME TECHNOLOGY - JAPAN
ITO Fumio - TOBA NATIONAL COLLEGE OF MARITIME TECHNOLOGY - JAPAN
SHIOAMOKA Yoshihiro - TOBA NATIONAL COLLEGE OF MARITIME TECHNOLOGY - JAPAN
YAMAMOTO Naoki - TOBA NATIONAL COLLEGE OF MARITIME TECHNOLOGY - JAPAN

0710 - High-frequency Soft-switching Current-fed Inverter for Off-grid Micro-generation: Fuel Cell Application for Rural Electrification/Development

RATHORE Akshay - NATIONAL UNIVERSITY OF SINGAPORE - SINGAPORE

0774 - Parallel/Series Connection of Self-Sustained Oscillating Series-Parallel Resonant Converters

AIGNER Hubert - LORCH - AUSTRIA
BIELA Juergen - ETH ZURICH - SWITZERLAND

0851 - Overview of Novel Loss-Mitigating Schemes for High-Frequency-Link Inverters with Application Potential for PV, Wind, Fuel Cell, Energy Storage, and EV/HEV

MAZUMDER Sudip - UNIVERSITY OF ILLINOIS, CHICAGO - UNITED STATES OF AMERICA

14:10 **DS3d: Topic 8: Measurements and Sensors**

Location: Hall 3

Chair: Dr. Chris HEWSON, PEMUK, UNITED KINGDOM
Co-Chair:

0131 - A digital platform for real-time simulation of power converters with high switching frequency

DE CUYPER Kevin - ULB - BELGIUM
OSEE Michel - ULB - BELGIUM
ROBERT Frederic - ULB - BELGIUM
MATHYS Pierre - ULB - BELGIUM

0156 - A Fully Automated Measurement Set-up for the Determination of the Reverse Recovery Behaviour of Ultra-Fast Diodes

STAHL Juergen - UNIVERSITY OF ERLANGEN - GERMANY
KUEBRICH Daniel - UNIVERSITY OF ERLANGEN - GERMANY
DUERBAUM Thomas - UNIVERSITY OF ERLANGEN - GERMANY
PATZ Janina - UNIVERSITY OF ERLANGEN - GERMANY
LEICHT Anne-Christine - UNIVERSITY OF ERLANGEN - GERMANY

0345 - Accuracy study of frequency converter estimates used in the sensorless diagnostics of induction-motor-driven systems

AHONEN Tero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND
TAMMINEN Jussi - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND
AHOLA Jero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

NIEMELÄ Markku - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0351 - Evaluation of Machine Learning Techniques for Electro-Mechanical System Diagnosis

DELGADO Miguel - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

GARCIA Antoni - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

URRESTY Julio - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

RIBA Jordi-Roger - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

ORTEGA Juan Antonio - TECHNICAL UNIVERSITY OF CATALONIA - SPAIN

0385 - Ground fault detection method for three phase inverters based on the third harmonic

KÄRKKÄINEN Tommi - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

RAUMA Kimmo - VISEDO OY - FINLAND

SILVENTOINEN Pertti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0514 - On the Role of the Shaft End in the Radio-Frequency Emission of Discharge Bearing Currents in Induction Motors

AHOLA Jero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

MUETZE Annette - GRAZ UNIVERSITY OF TECHNOLOGY - AUSTRIA

NISKANEN Ville - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0520 - Stochastic model in Eddy Current Non Destructive Testing

HOMBERG Charles - ARTS ET MÉTIERS PARISTECH - L2EP - FRANCE

HENNERON Thomas - UNIVERSITE LILLE1 - FRANCE

CLENET Stéphane - ARTS ET MÉTIERS PARISTECH - L2EP - FRANCE

0521 - Implementing clamp on wireless torque measurement system for rotating shaft applications

NISKANEN Ville - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

AHOLA Jero - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0556 - A new Digital Modulated Interface for a Precise and Robust Current Sensor

BOUABANA Abdoukarim - RUHR-UNIVERSITY BOCHUM - GERMANY

SOURKOUNIS Constantinos - RUHR-UNIVERSITY BOCHUM - GERMANY

0586 - A fast estimation algorithm for low-frequency oscillations in power systems

BEZA Mebtu - CHALMERS UNIVERSITY OF TECHNOLOGY - SWEDEN

BONGIORNO Massimo - CHALMERS UNIVERSITY OF TECHNOLOGY - SWEDEN

0635 - Analysis Of The Technology OF Cable Fault Detection And Location On-Line

WEI Chen - NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS - CHINA

LI Wang - NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS - CHINA

0744 - A simple calorimetric setup for the accurate measurement of losses in power electronic converters

DIMITRAKAKIS Georgios - UNIVERSITY OF PATRAS - GREECE

TATAKIS Emmanuel - UNIVERSITY OF PATRAS - GREECE

NANAKOS Anastasios - UNIVERSITY OF PATRAS - GREECE

0892 - Predictive Zero-Crossing Detection Algorithm by Time Localised Iterative Least-Square Technique

BASU Biswajit - TRINITY COLLEGE DUBLIN - IRELAND

BASU Malabika - DIT - IRELAND

0910 - Line impedance estimation using model based identification technique

CIOBOTARU Mihai - UNIVERSITY OF NEW SOUTH WALES - AUSTRALIA
AGELIDIS Vassilios G. - UNIVERSITY OF NEW SOUTH WALES - AUSTRALIA
TEODORESCU Remus - AALBORG UNIVERSITY - DENMARK

14:10 **DS3e: Topic 9: Motion Control, Robotics, Special Drives, Haptics, Communication in Drive Systems** *Location: Hall 3*

Chair: Dr. Markus REINHARD, SIEMENS AG, GERMANY
Co-Chair:

0192 - Online Parameter-Estimation of Feedforward Gains in cascaded control structures for Servo Drives

PLETSCHEN Ingo - THYSSENKRUPP AUFZUGSWERKE - GERMANY
ROHR Stephan - THYSSENKRUPP AUFZUGSWERKE - GERMANY
HERRMANN Guenther - THYSSENKRUPP AUFZUGSWERKE - GERMANY
KENNEL Ralph - TECHNISCHE UNIVERSITÄT MÜNCHEN - GERMANY

0515 - Dynamic emulation of multi-mass mechanical loads in electric drives

SAARAKKALA Seppo - AALTO UNIVERSITY - FINLAND
ALAHÄIVÄLÄ Antti - AALTO UNIVERSITY - FINLAND
HINKKANEN Marko - AALTO UNIVERSITY - FINLAND
LUOMI Jorma - AALTO UNIVERSITY - FINLAND

0767 - Preliminary feasibility study of a speed estimator for piezoelectric actuators used in forging processes

GIRAUD-AUDINE Christophe - ARTS ET METIERS PARISTECH - FRANCE
GIRAUD Frederic - LE2P POLYTECH'LILLE/USTL - FRANCE

0848 - Motor Condition Monitoring of Induction Motor with Programmable Logic Controller and Industrial Network

PUCHE-PANADERO Ruben - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
PINEDA-SANCHEZ M. - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
RIERA-GUASP M. - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
SAPENA-BANO A. - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
ROGER-FOLCH J. - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN
PEREZ-CRUZ J. - UNIVERSIDAD POLITECNICA DE VALENCIA - SPAIN

14:10 **DS3f: Topic 10: Synchronous, Permanent Magnet Synchronous and Brushless DC Motor** *Location: Hall 3*

Chair: Dipl.-Ing. Andreas EILENBERGER, TECHNICAL UNIVERSITY OF VIENNA, AUSTRIA
Co-Chair:

0074 - Design and Control of a Single Stator Dual PM Rotors Axial Synchronous Machine for Hybrid Electric Vehicles

TUTELEA Lucian Nicolae - POLITECHNICA UNIVERSITY OF TIMISOARA - ROMANIA
BOLDEA Ion - POLITECHNICA UNIVERSITY OF TIMISOARA - ROMANIA
DEACONU Sorin Ioan - POLITECHNICA UNIVERSITY OF TIMISOARA - ROMANIA
MARIGNETTI Fabrizio - UNIVERSITY OF CASSINO - ITALY
POPA Gabriel Nicolae - POLITECHNICA UNIVERSITY OF TIMISOARA - ROMANIA

0087 - Principle and Basic Characteristics of a Hybrid Variable Magnetic-Force Motor

SAKAI Kazuto - TOYO UNIVERSITY - JAPAN
KURAMOCHI Satoru - TOYO UNIVERSITY - JAPAN
HASHIMOTO Hisanori - TOYO UNIVERSITY - JAPAN

0216 - Comparison of an Active Stator and a 3-phase synchronous machine

T. IRENJI Neamat - CONVERTEAM UK LTD - UNITED KINGDOM

0219 - Detection of Inter-Turns Short Circuits in Permanent Magnet Synchronous Motors Operating under Transient Conditions by means of the Zero Sequence Voltage

URRESTY Julio - UNIVERSITAT POLITECNICA CATALUNYA MCIA - SPAIN

RIBA Jordi-Roger - UNIVERSITAT POLITECNICA DE CATALUNYA MCIA - SPAIN

SAAVEDRA Harold - UNIVERSITAT POLITECNICA CATALUNYA MCIA - SPAIN

ROMERAL Jose Luis - UNIVERSITAT POLITECNICA DE CATALUNYA MCIA - SPAIN

0273 - Sensorless Control at High Starting Torque of a 4000 Nm Traction Drive With Permanent Magnet Synchronous Machine

DEMMELMAYR Florian - TECHNICAL UNIVERSITY OF VIENNA - AUSTRIA

0362 - Parameter Optimization Study and Performance Analysis of 6S-8P Permanent Magnet Flux Switching Machine with Field Excitation for High Speed Hybrid Electric Vehicles

SULAIMAN Erwan - NAGOYA INSTITUTE OF TECHNOLOGY - JAPAN

KOSAKA Takashi - NAGOYA INSTITUTE OF TECHNOLOGY - JAPAN

MATSUI Nobuyuki - NAGOYA INSTITUTE OF TECHNOLOGY - JAPAN

0371 - Thermal analysis of permanent-magnet synchronous reluctance machines

NATEGH Shafiqh - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

WALLMARK Oskar - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

LEKSELL Mats - ROYAL INSTITUTE OF TECHNOLOGY (KTH) - SWEDEN

0468 - Design of integrated electro-hydraulic power unit for hybrid mobile working machines

PONOMAREV Pavel - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

POLIKARPOVA Maria - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

HEINIKAINEN Olli - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

PYRHÖNEN Juha - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0482 - A Novel Switched Reluctance Machine with Windings and Permanent Magnets in the Stator Yoke

HASEGAWA Yu - TOHOKU UNIVERSITY - JAPAN

NAKAMURA Kenji - TOHOKU UNIVERSITY - JAPAN

ICHINOKURA Osamu - TOHOKU UNIVERSITY - JAPAN

0505 - Dynamic Simulation of Planetary type Magnetic Gear based on Reluctance Network Analysis

FUKUOKA Michinari - TOHOKU UNIVERSITY - JAPAN

NAKAMURA Kenji - TOHOKU UNIVERSITY - JAPAN

ICHINOKURA Osamu - TOHOKU UNIVERSITY - JAPAN

0522 - Basic Examination of Eddy Current Estimation based on Reluctance Network Analysis

YOSHIDA Yukihiro - TOHOKU UNIVERSITY - JAPAN

NAKAMURA Kenji - TOHOKU UNIVERSITY - JAPAN

ICHINOKURA Osamu - TOHOKU UNIVERSITY - JAPAN

0554 - The Influence of Impact Load on Torsional Dynamics of Generator Units

MIROSEVIC Marija - UNIVERSITY OF DUBROVNIK - CROATIA

MALJKOVIC Zlatko - FACULTY OF ELECTRICAL ENGINEERING AND COMPUTING - CROATIA

MILKOVIC Mateo - UNIVERSITY OF DUBROVNIK, CROATIA - CROATIA

0565 - Modelling of Electrically Excited Synchronous Machine (EESM) considering nonlinear material characteristics and multiple saliencies

SEILMEIER Markus - UNIVERSITY OF ERLANGEN-NUREMBERG - GERMANY

0641 - Evaluation of the Machine Non-Linearities as a Aid to Develop Self-Commissioning in Sensorless Drives

ARELLANO-PADILLA Jesus - UNIVERSITY OF NOTTINGHAM - UNITED KINGDOM

SUMNER Mark - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

GERADA Chris - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

BUCKLEY Gary - NOTTINGHAM UNIVERSITY - UNITED KINGDOM

0688 - Magnet eddy current loss calculation method for segmentation analysis on Permanent Magnet Machines

MADINA Patxi - FACULTY OF ENGINEERING, UNIVERSITY OF MONDRAGON - SPAIN

POZA Javier - FACULTY OF ENGINEERING, UNIVERSITY OF MONDRAGON - SPAIN

UGALDE Gaizka - FACULTY OF ENGINEERING, UNIVERSITY OF MONDRAGON - SPAIN

ALMANDOZ Gaizka - FACULTY OF ENGINEERING, UNIVERSITY OF MONDRAGON - SPAIN

0728 - Validation of Non-linear Dynamic FEM Model for Design of PM Machines with Concentrated Windings in Ship Application

HUNG Vu Xuan - DELFT UNIVERSITY OF TECHNOLOGY - NETHERLANDS

SAMUEL Ani - TU DELFT - NETHERLANDS

LAHAYE Domenico - TU DELFT - NETHERLANDS

POLINDER Henk - TU DELFT - NETHERLANDS

BRAM Ferreira - TU DELFT - NETHERLANDS

0751 - Performance Analysis and Comparison of Three Interior Permanent Magnet Synchronous Motor with High Homopolar Inductance for Electric Vehicle Applications

DOGAN Hussein - G2ELAB - FRANCE

FOGGIA Albert - G2ELAB - FRANCE

WURTZ Frédéric - G2ELAB - FRANCE

GARBUJO Lauric - G2ELAB - FRANCE

0846 - Multiphysic optimal design of an inverter fed PMSM and choice of the switching frequency

DAGUSE Benjamin - SUPELEC - FRANCE

JANNOT Xavier - MOTEURS LEROY SOMER - FRANCE

LEDOUX Christophe - SUPELEC - FRANCE

LEFRANC Pierre - SUPELEC - FRANCE

VANNIER Jean-Claude - SUPELEC - FRANCE

0881 - Investigation into Commutation Torque Ripple Reduction in a BDCM Drive Using Various Combined PWM-Square-PWM Control Strategies

ZEROUG Houcine - UNIVERSITY OF SCIENCES AND TECHNOLOGY HB - ALGERIA

TADRIST Nadia - UNIVERSITY OF SCIENCES AND TECHNOLOGY HB - ALGERIA

BOUKAIS Boussad - UNIVERSITY OF MOULOUD MAMMERI - ALGERIA

SAHRAOUI Houria - ENP - ALGERIA

14:10 **DS3g: Topic 10:Other Electric Machines**

Location: Hall 3

Chair: Prof. Dr. Ilhami COLAK, GAZI UNIVERSITY, TURKEY

Co-Chair:

0001 - Prediction of the sound power levels of squirrel cage induction machines in different operation points taking into account mechanical boundary conditions for modal analysis

KNOPIK Thomas - DARMSTADT UNIVERSITY OF TECHNOLOGY - GERMANY

BINDER Andreas - DARMSTADT UNIVERSITY OF TECHNOLOGY - GERMANY

0003 - Sensorless Control of SRM by the Aid of Artificial Neural Network Adaptive Reference Model

PAVLITOV Constantin - TU SOFIA - BULGARIA

CHEN Hao - CHINA UNIVERSITY OF MINING AND TECHNOLOGY - CHINA

COLAK Ilhami - GAZI UNIVERSITY - TURKEY

TASHEV Tasho - TU SOFIA - BULGARIA

GORBOUNOV Yassen - TECHNICAL UNIVERSITY OF SOFIA - BULGARIA

0090 - Fundamental experiments of transfer device using ultrasonic levitation

FURUTANI Katsushi - TOYOTA TECHNOLOGICAL INSTITUTE - JAPAN

ONO Masataka - TOYOTA TECHNOLOGICAL INSTITUTE - JAPAN

0102 - THE CALCULATION OF COGGING FORCE IN PERMANENT MAGNET LINEAR MOTOR BY USING OF ANALYTICAL AND FINITE ELEMENT METHODS

ZAREH Mohammad Reza - ISLAMIC AZAD UNIVERSITY- SHAHR-E-MAJLESI BRANCH - SPAIN

MARZBAND Mousa - ISLAMIC AZAD UNIVERSITY- LAHIJAN BRANCH - SPAIN

POURESMAEIL Edris - CITCEA-UPC - SPAIN

0289 - A Novel Method for Torque Ripple Reduction in 6/4 Two Rotor Stack Switched Reluctance Motor

SIADATAN Alireza - SHAHID BEHESHTI UNIVERSITY G.C. - IRAN

ASGAR Majid - SHAHID BEHESHTI UNIVERSITY G.C. - IRAN

NAJMI Vahid - SHAHID BEHESHTI UNIVERSITY G.C. - IRAN

AFJEI Ebrahim - SHAHID BEHESHTI UNIVERSITY G.C. - IRAN

0454 - Parameter adaptation of a sensorless controlled induction machine by measurement of the slip frequency

RUETER Markus - RITTER ELEKTRONIK GMBH - GERMANY

OBERSCHHELP Wolfgang - UAS GELSENKIRCHEN - GERMANY

SCHROEDER Guenter - UNIVERSITY OF SIEGEN - GERMANY

0622 - Simulation of Linear Switched Reluctance Motor Drives

BLANQUE Baldui - UNIVERSITAT POLITECNICA DE CATALUNYA - SPAIN

ANDRADA Pere - UNIVERSITAT POLITECNICA DE CATALUNYA - SPAIN

GARCIA-AMOROS Jordi - UNIVERSITY ROVIRA I VIRGILI - SPAIN

0759 - Flux-Weakening Strategies for a Five-Phase PM Synchronous Machine

LU Li - VALEO - FRANCE

SEMAIL Eric - ENSAM PARISTECH / L2EP CENTRE DE LILLE - FRANCE

KOBYLANSKI Luc - VALEO ENGINE ELECTRICAL EQUIPMENT - FRANCE

KESTELYN Xavier - ENSAM PARISTECH / L2EP CENTRE DE LILLE - FRANCE

14:10 **DS3h: Topic 11: Adjustable Speed Drives**

Location: Hall 3

Chair: Prof. Dr. Thomas WOLBANK, VIENNA UNIVERSITY OF TECHNOLOGY, AUSTRIA

Co-Chair:

0056 - A Sensorless Control for Damping of Torsional Vibrations with Middle Voltage Induction Motor Drive for Compressor Application

NAGATA Koichiro - HITACHI LTD. - JAPAN

NEMOTO Haruo - HITACHI LTD. - JAPAN

KATAYAMA Toshio - HITACHI LTD. - JAPAN

AKITA Yoshitoshi - HITACHI LTD. - JAPAN

0080 - A FAULT TOLERANT CONTROL AND POWER ELECTRONIC FOR A PERMANENT MAGNET SYNCHRONOUS MOTOR DRIVE

Errabelli Rammohan - TU-DARMSTADT - GERMANY

MUTSCHLER Peter - TU-DARMSTADT - GERMANY

0085 - Motor terminal overvoltage suppression method for parallel inverters

KORHONEN Juhamatti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

LAAKKONEN Tommi - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

ITKONEN Toni - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

TYSTER Juho - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

STRÖM Juha-Pekka - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

SILVENTOINEN Pertti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0279 - Energy Efficient Sensorless Scalar Control for Full Speed Operating Range IM Drives

SCELBA Giacomo - UNIVERSITY OF CATANIA - ITALY

CONSOLI Alfio - UNIVERSITY OF CATANIA - ITALY

SCARCELLA Giuseppe - UNIVERSITY OF CATANIA - ITALY

CACCIATO Mario - UNIVERSITY OF CATANIA - ITALY

0328 - A Control system of the multistage active rectifier energizing power shovel multi-motor variable-frequency drive for mining applications

PRONIN Mikhail - JSC POWER MACHINES - RUSSIA

SHONIN Oleg - SAINT-PETERSBURG MINING INSTITUTE - RUSSIA

GOGOLEV Gregory - JSC POWER MACHINES - RUSSIA

VORONTSOV Alexey - JSC POWER MACHINES - RUSSIA

0390 - A Pumped Storage Power Plant with Double-Fed Induction Machine and Cascaded Frequency Converter

GOGOLEV Grigorii - JSC POWER MACHINES - RUSSIA

VORONTSOV Alexey - JSC POWER MACHINES - RUSSIA

PRONIN Mikhail - JSC POWER MACHINES - RUSSIA

SHONIN Oleg - SAINT-PETERSBURG MINING INSTITUTE - RUSSIA

0399 - Service Continuity of an IM Distributed Railway Traction with a Speed Sensor Fault

ACHOUR Tahar - LAPLACE UNIVERSITY OF TOULOUSE - FRANCE

PIETRZAK-DAVID Maria - LAPLACE UNIVERSITY OF TOULOUSE - FRANCE

0442 - Monitoring of Rotor Bar Faults in Induction Generators with Full-Size Inverter

STOJICIC Goran - VIENNA UNIVERSITY OF TECHNOLOGY - AUSTRIA

SAMONIG Matthias - VIENNA UNIVERSITY OF TECHNOLOGY - AUSTRIA

NUSSBAUMER Peter - VIENNA UNIVERSITY OF TECHNOLOGY - AUSTRIA

JOKSIMOVIC Gojko - UNIVERSITY OF MONTENEGRO PODGORICA - AUSTRIA

VAŠAK Mario - UNIVERSITY OF ZAGREB - CROATIA

PERIC Nedjeljko - UNIVERSITY OF ZAGREB, CROATIA - CROATIA

WOLBANK Thomas - VIENNA UNIVERSITY OF TECHNOLOGY - AUSTRIA

0568 - Programmable Logic Device Based Brushless DC motor Control

VAN DEN BOSSCHE Alex - UGENT - BELGIUM

BOZALAKOV Dimitar - TECHNICAL UNIVERSITY OF VARNA - BULGARIA

VYNCKE Thomas - GHENT UNIVERSITY - BELGIUM

VALCHEV Vencislav - TECHNICAL UNIVERSITY OF VARNA - BULGARIA

0610 - Steady State Performance and Stability Analysis of Matrix Converter Fed Induction Motor Drive under Volt/Hertz Control

MIHRET Melaku - TENNESSEE TECHNOLOGICAL UNIVERSITY - UNITED STATES OF AMERICA

OJO Olorunfemi - TENNESSEE TECHNOLOGICAL UNIVERSITY - UNITED STATES OF AMERICA

0627 - Hardware-In-the-Loop Simulation of a Complex AC-fed Motor Drive with Triple Active Front-End 3-level Rectifiers and Induction Motor Drive using an Intra-Step-Parallel State-Space-Nodal Solver

WANG Weihua - OPAL-RT TECHNOLOGIES - CANADA

BAKAY Loicq - OPAL-RT TECHNOLOGIES - CANADA

DUFOUR Christian - OPAL-RT TECHNOLOGIES - CANADA

0787 - Novel Switched Reluctance Motor Drive Circuit with Voltage Boost Function without Additional Reactor

KIDO Yujiro - TOKYO UNIVERSITY OF SCIENCE - JAPAN

HOSHI Nobukazu - TOKYO UNIVERSITY OF SCIENCE - JAPAN

CHIBA Akira - TOKYO INSTITUTE OF TECHNOLOGY - JAPAN

OGASAWARA Satoshi - HOKKAIDO UNIVERSITY - JAPAN

TAKEMOTO Masatsugu - HOKKAIDO UNIVERSITY - JAPAN

0807 - Effect of Machine Asymmetry on a Two-machine Direct Torque Controlled Induction Motor Drive

JOSHI Bhakti - IIT BOMBAY - INDIA

CHANDORKAR Mukul - IIT BOMBAY - INDIA

0839 - Active du/dt filter dimensioning in variable speed AC drives

STRÖM Juha-Pekka - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

TYSTER Juho - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

KORHONEN Juhamatti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

PURHONEN Mikko - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

SILVENTOINEN Pertti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

0874 - Efficiency Measurements on Active du/dt Output Filtering

TYSTER Juho - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

STRÖM Juha-Pekka - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

KORHONEN Juhamatti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

SILVENTOINEN Pertti - LAPPEENRANTA UNIVERSITY OF TECHNOLOGY - FINLAND

14:10 **DS3i: Topic 13: Energy Efficiency, Energy Saving Issues in System Components**

Location: Hall 3

Chair: Dr. Patrick PALMER, UNIVERSITY OF CAMBRIDGE, UNITED KINGDOM
Co-Chair:

0069 - High Efficient Winding Drives with Continuous Variable Transmission (CVT)

BENATH Kenneth - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY

HOFMANN Wilfried - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY

MÜLLER Volkmar - TECHNISCHE UNIVERSITAET DRESDEN - GERMANY

0070 - Multilevel NPC inverter for low-voltage applications

MECKE Rudolf - HOCHSCHULE HARZ, UNIVERSITY OF APPLIED SCIENCES - GERMANY

0193 - REAL TIME IMPLEMENTATION OF SUBOPTIMAL CONTROL POSITION DRIVE SYSTEM WITH INDUCTION MACHINE

TRAIAN Munteani - UNIVERSITY DUNAREA DE JOS GALATI - ROMANIA
EMIL Rosu - UNIVERSITY DUNAREA DE JOS GALATI - ROMANIA
ROMEO Paduraru - UNIVERSITY DUNAREA DE JOS GALATI - ROMANIA
TEODOR Dumitriu - UNIVERSITY DUNAREA DE JOS GALATI - ROMANIA
MIHAI Culea - UNIVERSITY DUNAREA DE JOS GALATI - ROMANIA

0233 - Combined Solar and AC Mains Powered Lighting System

BOEKE Ulrich - PHILIPS RESEARCH LABORATORIES - NETHERLANDS
WENDT Matthias - PHILIPS RESEARCH LABORATORIES - NETHERLANDS
YSEBOODT Lennart - PHILIPS RESEARCH LABORATORIES - NETHERLANDS

0281 - Extended-Flux Model with Core-loss Resistance of Synchronous Reluctance Motors and Torque Estimation without Core Loss Measurement and Position Encoder

HASEGAWA Masaru - CHUBU UNIVERSITY - JAPAN
KITAHARA Hiroki - CHUBU UNIVERSITY - JAPAN

0384 - Smoothing Control of Wind Farm Output Fluctuation by New Scheme with Energy Storage System

TAKAHASHI Rion - KITAMI INSTITUTE OF TECHNOLOGY - JAPAN
NAKATANI Masachika - KITAMI INSTITUTE OF TECHNOLOGY - JAPAN
TAMURA Junji - KITAMI INSTITUTE OF TECHNOLOGY - JAPAN
S.M. Muyeen - THE PETROLEUM INSTITUTE, ABU DHABI - UNITED ARAB EMIRATES
SUGIMASA Masatoshi - HITACHI, LTD. - JAPAN
KOMURA Akiyoshi - HITACHI LTD. - JAPAN
FUTAMI Motoo - HITACHI LTD. - JAPAN
ICHINOSE Masaya - HITACHI LTD. - JAPAN
IDE Kazumasa - HITACHI LTD. - JAPAN

0413 - Thermal modelling to analyze the effect of cell temperature on PV modules energy efficiency

ROMARY Florian - LMP - FRANCE
CALDEIRA Adelphé - LMP - FRANCE
JACQUES Sebastien - LMP - FRANCE
SCHELLMANN Ambroise - LMP - FRANCE

0748 - Efficiency improvement in DC and AC motor powered electric vehicles

KARATZAFERIS Ioannis - UNIVERSITY OF PATRAS - GREECE
LAMPROPOULOS Lampros - UNIVERSITY OF PATRAS - GREECE
TATAKIS Emmanuel - UNIVERSITY OF PATRAS - GREECE

0791 - Energy Efficient Storage Systems in the DC Link for the Drive Unit of Machine Tools

KOLESNIKOV Artem - TU CHEMNITZ - GERMANY
NEUGEBAUER Reimund - FRAUNHOFER INSTITUTE FOR MT AND FORMING TECHNOLOGY - GERMANY
RICHTER Mark - FRAUNHOFER INSTITUTE FOR MT AND FORMING TECHNOLOGY - GERMANY

14:10 **DS3j: Topic 14: Converters for Rotating and Linear Generators**

Location: Hall 3

Chair: PhD Student Baïdy TOURE, G2ELAB/LIEBHERR AEROSPACE, FRANCE
Co-Chair:

0096 - Indirect Vector Control of an Induction Generator

DOMÍNGUEZ-GARCÍA Jose Luis - CATALONIA INSTITUT FOR ENERGY RESEARCH - SPAIN

GOMIS-BELLMUNT Oriol - CITCEA-UPC - SPAIN

SUDRIA-ANDREU Antoni - CITCEA-UPC - SPAIN

TRILLA-ROMERO Lluís - CATALONIA INSTITUT FOR ENERGY RESEARCH - SPAIN

0181 - A Novel Position Sensorless Control Strategy of Doubly-fed Induction Generator (DFIG) for Wind Turbine

YANG Wenqiang - GE GLOBAL RESEARCH - CHINA

LIU Yunfeng - GE GLOBAL RESEARCH - CHINA

0190 - Thermal Stress Analysis of IGBT Modules in VSCs for PMSG in Large Offshore Wind Energy Conversion Systems

PITTINI Riccardo - SINTEF ENERGY RESEARCH - NORWAY

D'ARCO Salvatore - NTNU - NORWAY

HERNES Magnar - SINTEF ENERGY RESEARCH - NORWAY

PETTERTEIG Astrid - SINTEF ENERGY RESEARCH - NORWAY

0237 - Control of SCIG wind farm using a single VSC

TRILLA Lluís - IREC - SPAIN

GOMIS Oriol - IREC - CITCEA - SPAIN

LIANG Jun - CARDIFF UNIVERSITY - UNITED KINGDOM

JING Tianjun - CARDIFF UNIVERSITY - UNITED KINGDOM

SUDRIA Antoni - IREC - SPAIN

0306 - Improvement of Fault Ride Through Capability of Wind Farm using DFIG Considering SDBR

OKEDU Kenneth - KITAMI INSTITUTE OF TECHNOLOGY - JAPAN

MUYEEN S.M. - THE PETROLEUM INSTITUTE, ABU DHABI - UNITED ARAB EMIRATES

TAKAHASHI Rion - KITAMI INSTITUTE OF TECHNOLOGY - JAPAN

TAMURA Junji - KITAMI INSTITUTE OF TECHNOLOGY - JAPAN

0417 - GRID CONNECTION FOR WAVE POWER FARMS

BLANCO Marcos - CIEMAT - SPAIN

LAFOZ Marcos - CIEMAT - SPAIN

RAMÍREZ Dionisio - ETSII - SPAIN

0512 - Circulating current control of double converter system for wind power generation

MORIZANE Toshimitsu - OSAKA INSTITUTE OF TECHNOLOGY - JAPAN

KIMURA Noriyuki - OSAKA INSTITUTE OF TECHNOLOGY - JAPAN

0536 - Flicker Mitigation in DFIG Wind Turbine Systems

VAN Tan Luong - YEUNGNAM UNIVERSITY - KOREA

NGUYEN Thanh Hai - YEUNGNAM UNIVERSITY - KOREA

LEE Dong-Choon - YEUNGNAM UNIVERSITY - KOREA

0542 - Design of Passive Converter for Wind Driven Generators

VAN DEN BOSSCHE Alex - UGENT - BELGIUM

YANKOV Plamen - TECHNICAL UNIVERSITY OF VARNA - BULGARIA

VALCHEV Vencislav - TECHNICAL UNIVERSITY OF VARNA - BULGARIA

0566 - Power Cycling Test Bench for IGBT Power Modules used in Wind Applications

WAGENITZ Dennis - BEUTH UNIVERSITY OF APPLIED SCIENCES BERLIN - GERMANY

WESTERHOLZ André - BEUTH UNIVERSITY OF APPLIED SCIENCES BERLIN - GERMANY
ERDMANN Eike - BEUTH UNIVERSITY OF APPLIED SCIENCES BERLIN - GERMANY
HAMBRECHT Andreas - BEUTH UNIVERSITY OF APPLIED SCIENCES BERLIN - GERMANY
DIECKERHOFF Sibylle - TU BERLIN - GERMANY

0631 - Investigation of Variable DC Link Voltage Operation of a Permanent Magnet Synchronous Generator (PMSG) based Wind Turbine with Fully Rated Converters at Steady State

DAYARATNE Upendra - STAFFORDSHIRE UNIVERSITY - UNITED KINGDOM
TENNAKON Sarath - STAFFORDSHIRE UNIVERSITY - UNITED KINGDOM
KNIGHT Jeremy - CONVERTEAM - UNITED KINGDOM
SHAMMAS Noel - STAFFORDSHIRE UNIVERSITY - UNITED KINGDOM

0742 - Control of a Hybrid Excitation Synchronous Generator for a wind energy application

BEN SEDRINE Emna - SATIE ENS CACHAN - FRANCE
VIDO Lionel - SATIE-UCP - FRANCE
SLAMA-BELKHODJA Ilhem - ENIT - TUNISIA
GABSI Mohamed - SATIE ENS CACHAN - FRANCE

0753 - Operating characteristics of a 1 kW three-phase to single-phase matrix converter with hybrid control scheme of power compensation and modulation applied to gas engine cogeneration system

MIURA Yushi - OSAKA UNIVERSITY - JAPAN
AMANO Tomofumi - OSAKA UNIVERSITY - JAPAN
ISE Toshifumi - OSAKA UNIVERSITY - JAPAN

0775 - Steady State Lifetime Estimation of Power Semiconductors in Rotor Side Converter of a 2 MW DFIG Wind Turbine via Power Cycling Capability Analysis

FUCHS Felix - INSTITUTE FOR DRIVE SYSTEMS AND POWER ELECTRONICS - GERMANY
MERTENS Axel - INSTITUTE FOR DRIVE SYSTEMS AND POWER ELECTRONICS - GERMANY

0835 - Fault ride through study of doubly fed induction generator wind turbine in real time simulation environment

MÄKINEN Anssi - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND
TUUSA Heikki - TAMPERE UNIVERSITY OF TECHNOLOGY - FINLAND

0837 - Impact of Different Control Schemes on the Life Consumption of Power Electronic Modules for Variable Speed Wind Turbines

MUSALLAM Mahera - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
JOHNSON Mark - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
Fazeli Meghdad - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
ASHER Greg - NOTTINGHAM UNIVERSITY - UNITED KINGDOM
BAILEY Chris - UNIVERSITY OF GREENWICH - UNITED KINGDOM

0854 - Reduction of Voltage Violations at Remote Location by Intelligent Active and Reactive Power Control of a DFIG Based Wind Turbine

DA COSTA Jean Patric - UNIVERSITY OF KASSEL - KDEE - GERMANY
GAFARO Francisco - IWES - GERMANY
ZACHARIAS Peter - UNIVERSITY OF KASSEL - KDEE - GERMANY

0884 - A Sensorless Control Method for Maximum Power Point Tracking of Wind Turbine Generators

MA Zhenyu - LOUGHBOROUGH UNIVERSITY - UNITED KINGDOM

