Agenda / Programm 2017

Electric & Electronic Systems in Hybrid and Electrical Vehicles and Electrical Energy Management

Elektrik & Elektronik in Hybrid- und Elektrofahrzeugen und elektrisches Energiemanagement

May 17-18, 2017 in Bamberg
### Agenda

**Wednesday 17, May**

Simultaneous translation will be provided.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
</table>
| 09:00 | Welcome / Begrüßung  
Bernd Hömberg, Haus der Technik e.V.  
Ottmar Sirch, BMW Group  
Carsten Hoff, CLAAS KGaA mbH |
| 09:10 | Introduction / Einführung  
Ottmar Sirch, BMW Group |
| 09:30 | eMobility as driver for vehicle connectivity – how the propulsion gets part of the real environment and grows into a comprehensive context  
Oliver Maiwald, Continental Automotive GmbH, Senior Vice President Powertrain Technology & Innovation |
| 10:10 | Coffee Break / Kaffeepause |
| 10:25 | Low voltage Energy Storage  
Dirk Uwe Sauer • Marc Thele |
| 10:25 | 48V Architectures and Components I  
Friedrich Graf |
| 10:25 | Dual 12 Volt Battery Systems – Analysis of Power Capability and Current Distribution considering Battery Type, State of Charge and Connection to the Power Network  
Daniel Renner, Audi Electronics Venture GmbH |
| 10:25 | Coasting Strategies for CO2 Emission Reduction of P0 Hybrid cars  
André Körner, Hella KGaA Hueck & Co |
| 10:55 | The Battery in the Electrical Vehicle System - a Comparison of Technologies  
Jörn Albers, Johnson Controls Autobatterie GmbH & Co. KGaA |
| 10:55 | FEV 48 V Mild Hybrid – Optimization of BRM Operation Strategy in the 48 V Power Net  
Philip Griefnow, RWTH Aachen University |
| 10:55 | 48V Lithium-Ion Batteries in Automotive Applications  
Simon Beau, LG Chem – Europe Automotive Battery Tech Center |
| 10:55 | Components, systems and architectures and design tools for Micro up to Full Hybrid, Plug-in-Hybrid and Electric Vehicles  
Stefan Lauer, Continental Automotive GmbH |
| 11:25 | Thermal Analysis of Cooling Effects of Different Cooling Principles in a 48 V Automotive Battery Module  
Ziyi Wu, FH Aachen / RWTH Aachen |
| 11:25 | Boost recuperation machine – 48V e-drive characteristics and future system trends  
Rainer Peck, Robert Bosch GmbH |
| 11:25 | 48V Lithium-Ion Batteries in Automotive Applications  
Simon Beau, LG Chem – Europe Automotive Battery Tech Center |
| 11:25 | Components, systems and architectures and design tools for Micro up to Full Hybrid, Plug-in-Hybrid and Electric Vehicles  
Stefan Lauer, Continental Automotive GmbH |
| 11:55 | Lunch with Poster Session and Exhibition of Electric Vehicles / Mittagessen mit Postersession und Fahrzeugausstellung |
| 12:25 | Recent advancements in battery technologies and battery prices – myth and reality  
Dirk Uwe Sauer, ISEA Institut für Stromrichtertechnik und Elektrische Antriebe RWTH Aachen |
| 13:55 | Poster Presentations / Poster Präsentationen  
Philip Dost, Ruhr-Universität Bochum • Tobias Oeser, TESIS DYNAware GmbH • Stefan Werkstetter, Maxwell Technologies, Inc. |
| 14:25 | Poster Presentations / Poster Präsentationen  
Philip Dost, Ruhr-Universität Bochum • Tobias Oeser, TESIS DYNAware GmbH • Stefan Werkstetter, Maxwell Technologies, Inc. |
| 14:55 | Coffee Break with Poster Session and Exhibition of Electric Vehicles / Kaffeepause mit Postersession und Fahrzeugausstellung |
| 15:25 | E/E-Architecture  
Hartmut Pröbstle • Dirk Balzer |
| 15:25 | High power storage and charging  
Vera Lauer • Hans-Georg Herzog |
| 15:25 | Opel Ampera-e: Battery and Propulsion Train  
Manfred Hermann, Adam Opel AG |
| 15:25 | Infrastructural Challenges  
Marco Jung, Fraunhofer-Institut für Windenergie und Energiesystemtechnik IWES |
| 15:55 | Volvo Cars electrical architecture evolution into the next decade  
Robert Eriksson, Volvo Cars |
| 15:55 | The Future of Fast Charging: 800 V  
Jürgen Mittnacht, Porsche AG |
| 16:25 | 12/48V power supply system architectures and 48V components  
Olivier Coppin, Valeo |
| 16:25 | Challenges in Battery Charging  
Dirk Uwe Sauer, ISEA, RWTH Aachen |
| 16:55 | E-Systems for Autonomous Driven Vehicles  
Antoni Ferré, LEAR Corporation |
| 16:55 | Discussion / Diskussion  
Moderation: Vera Lauer • Hans-Georg Herzog |
<p>| 17:25 | End of Day 1 / Ende erster Tag |
| 19:00 | Evening Reception / Abendempfang |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Room / Raum: K6/K7</th>
<th>Room / Raum: K3</th>
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</thead>
</table>
| 08:30 | Development of Powertrain Electronics in Hybrid and Electric Vehicles  
Richard Dixon, IHS Markit | System design of the electric powertrain of hybrid electric distribution vehicles  
Johannes Maiterth, RWTH Aachen University |
| 09:00 | Characterization, Mission Profile Analysis and Calorimetric Loss Measurement of a SiC Hybrid Module for Main Inverter Application of Electric Vehicles  
Ajay Poonjal Pai, Infineon Technologies AG | Urban eTruck  
Ralf Bartelmeß, Daimler AG |
| 09:30 | Application of Spread Spectrum Techniques for the Reduction of Disturbances of Power Electronic Converters  
Andreas Bendicks, TU Dortmund | Zero Emission CV – Coming Soon  
n.n., EvoBus GmbH |
| 10:00 | High power density on-board charger based GaN-transistors  
Manuel Raiman, BMW Group | GridCON – Concept of a Grid-Connected, Fully Autonomous Electric Agricultural Machine  
Nicolai Tarasinski, John Deere GmbH & Co. KG |
| 10:30 | Coffee Break with Poster Session and Exhibition of Electric Vehicles / Kaffeepause mit Postersession und Fahrzeugausstellung | |
| 10:50 | On-board Power Supply for Safety Functions  
Jan Lichtermann • Marc Thele | Methods & Tools  
Ludwig Brabetz • Vera Lauer |
| 11:20 | Examination of fault-tolerant on-board power supply topologies  
Fabian Schippersge, Porsche AG | Emulation of a predefined Impedance Behavior for High Voltage Electrical Distribution System Test Benches  
Luise Drüner, Universität Kassel |
| 11:50 | Fault detection and localisation in automotive power supply systems by continuously comparing measured data and simulated data with fault model consideration  
Michael Kiffmeier, TU Dortmund | High-precision, High-dynamic Emulation of Lithium-Ion Cells for the Entire Battery Life Cycle  
Matthias Puchta, Fraunhofer Institut für Windenergie und Energiesystemtechnik |
| 12:20 | Lunch with Poster Session and Exhibition of Electric Vehicles / Mittagessen mit Postersession und Fahrzeugausstellung | |
| 13:40 | Market development of electric vehicles in China  
Nicole Steiger, JSC AUTOMOTIVE GmbH | 48 V Traction Drives for the BEV Mass Market  
Dieter Gerling, Universität der Bundeswehr München |
| 14:10 | Coffee Break with Poster Session and Exhibition of Electric Vehicles / Kaffeepause mit Postersession und Fahrzeugausstellung | |
| 14:20 | Control of an Electrical Machine and an Electrical Supercharger Based on 48 V with a Focus on Driving Performance  
Klaus Lüpkes, Daimler AG | Decision based coordination of a double voltage network  
Anton Renner, BMW Group |
| 14:50 | Limits and opportunities of the future 12/48 V powernet  
Stephanie Preisler, Continental Automotive GmbH | EMR – Energetic Macroscopic Representation  
Clement Mayet, University Lille |
| 15:20 | 48V Waterpumps  
Thomas Wienecke, Rheinmetall Automotive AG | The graphical representation of complex cybernetic systems  
Joachim Fröschl, BMW Group |
| 15:50 | Summary and Goodbye / Zusammenfassung und Verabschiedung  
Ottmar Sirch, Carsten Hoff | |
| 16:00 | End of Conference / Ende der Veranstaltung | |
## Prices and Conditions / Preise und Konditionen

<table>
<thead>
<tr>
<th>Category</th>
<th>Price</th>
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<tbody>
<tr>
<td>Regular Fee / Regulärpreis</td>
<td>€ 1,295,00,-</td>
</tr>
<tr>
<td>Member HDT / HDT-Mitglieder</td>
<td>€ 1,245,00,-</td>
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<tr>
<td>Employees of University / Hochschulangehörige</td>
<td>€ 485,-</td>
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<tr>
<td>Students (Proof necessary) / Studenten (gegen Nachweis)</td>
<td>€ 225,-</td>
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<tr>
<td>Posterauthors / Posterautoren</td>
<td>€ 485,-</td>
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<tr>
<td>Co-Authors / Co-Autoren</td>
<td>€ 990,-</td>
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with technical fair and electric vehicle exhibition / mit Fachausstellung und Präsentation von Elektrofahrzeugen