



International Conference 2024



Conference language is English

**eehe – electrical + electronic systems in hybrid &
electric vehicles, electrical energy management**

DATE May 15-16, 2024

LOCATION Welcome Kongresshotel Bamberg, Bamberg/Germany

LEADERS Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group
Dr.-Ing. Carsten Hoff, dSPACE GmbH

eehe.de

FB010/41286



May 15-16, 2024 in Bamberg

International Conference 2024

electrical + electronic systems in hybrid & electric vehicles
electrical energy management

welcome

We invite you to the **eehe International Conference 2024**, hosted in the contemporary conference facilities at the Welcome Kongresshotel in Bamberg.

The ongoing surge in electromobility, bolstered by the successful market introduction of highly electrified vehicles and the imperative for a substantial reduction in global CO₂ emissions following the Paris climate summit, necessitates a comprehensive reassessment of the entire automotive and supplier industry.

At the same time, new trends are developing through progressive digitalisation and the application of highly automated technologies. Electromobility is developing beyond normal driving into a digital means of transport and requires new competences, alliances and concepts.



**electrical
systems**



**electronic
systems**



**electrical
energy management**

The design of electric vehicles or electric cars (plug-in hybrids, full hybrids, micro-hybrids and vehicles with start-stop functions, etc.) is not only confronted with advancing developments, but also with ever increasing demands on costs and efficiency. Protagonists from research and science are facing up to the complex challenge and exchanging views on the important topics of the future together over two days at the **eehe – electrical + electronic systems in hybrid & electric vehicles, electrical energy management**.

What does eehe 2024 offer?

Through **eehe – electrical + electronic systems in hybrid & electric vehicles, electrical energy management**, HDT provides an outstanding platform for developers, users, and researchers to convene and share insights. Conference participants enjoy a unique opportunity to engage with key industry stakeholders all in one place, spanning two days.

eehe.de

Agenda

Day 1 // May 15, 2024

09:00 | Welcome & Introduction

Plenary hall

Dipl.-Ing. Bernd Hömberg, Haus der Technik e. V.

Dr.-Ing. Carsten Hoff, dSPACE GmbH

Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group

09:10 | Introductory lecture

On-board networks and E/E architecture

Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group

09:30 | Keynote 1

Plenary hall // Session chair: Dr.-Ing. Carsten Hoff, dSPACE GmbH

Introducing Mercedes-Benz Charging Solutions

Eva Greiner, CTO, Mercedes-Benz Mobility

10:00 | Coffee break + Room change

10:15 | Session 1

1A // Reliable Power Supply

Plenary hall // Session chair: Prof. Dr.-Ing. Stephan Frei, TU Dortmund +
Dr. rer. nat. Hartmut Pröbstle, BMW Group

Dr.-Ing. Martin Düsing, HELLA GmbH & Co. KGaA // Prof. Mohamed Ayeub,
University of Kassel // M. Sc. Marvin Rübartsch, TU Dortmund //

Dr. Roland Jancke, Fraunhofer Institute for Integrated Circuits IIS

1B // Charging

Room K3 // Session chair: Dr.-Ing. Vera Lauer, Mercedes-Benz AG +
Dr.-Ing. Marc Thele, Dr. Ing. h. c. F. Porsche AG

M. Sc. Tim-Hendrik Dietrich, TU Braunschweig //

Prof. Hector Sarnago, Universidad de Zaragoza //

Dipl.-Ing. Martin Dierkes, HELLA GmbH & Co. KGaA //

Prof. Oscar Lucia, University of Zaragoza

12:15 | Lunch break + Exhibition

13:45 | Overview 1

1A // Battery Swapping

Plenary hall // Session chair: Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group

**Comprehensive feasibility analysis of battery swapping vs. megawatt
charging for battery-electric long-haul trucks**

Bonjad Satvat, P3 automotive GmbH

14:15 | Poster Session

Plenary hall // Session chair: Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group

Submissions for posters are still possible until the beginning of April 2024

14:45 | Coffee break

15:00 | Session 2

2A // Power Supply Architectures

Plenary hall // Session chair: Dipl.-Ing. Thomas Weber, Mercedes-Benz AG

Emmanuel Talon, Valeo // M. Sc. Sebastian Jagfeld,
Vitesco Technologies GmbH // M. Sc. Michael Gerten, TU Dortmund //
Sam Chan, Infineon Technologies

2B // eFuse Technologies

Room K3 // Session chair: Dr.-Ing. Jan Lichtermann, Robert Bosch GmbH +
Dr.-Ing. Anatoliy Lyubar, Vitesco Technologies GmbH

M. Sc. Dominic Huschke, Volkswagen AG // Dr. Moritz Teuber,
Forvia Hella GmbH & Co. KGaA // Marco Wolf, TE connectivity
Germany GmbH // Dr.-Ing. Guangye Si, Infineon Technologies

17:00 | End of Day 1

18:00 | Come together: Klosterbräu Bamberg

Day 2 // May 16, 2024

08:30 | Keynote 2

2A // Vehicle-to-Grid and Smart Charging

Plenary hall // Session chair: Dipl.-Ing. Thomas Weber, Mercedes-Benz AG

Dr.-Ing. Christopher Hecht, RWTH Aachen University | ISEA

2B // Charged Up – Potentials of Battery Electric Trucks

Room K3 // Session chair: Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group

Dr.-Ing. Sebastian Wolff, TU Munich

09:00 | Coffee break + Room change

09:10 | Session 3

3A // Power Electronics

Plenary hall // Session chair: Dr.-Ing. Tomas Reiter, Infineon Technologies AG +
Dipl.-Ing. Manuel Gärtner, STMicroelectronics Application GmbH

Marcel Kiefel, Mercedes-Benz AG // Dr.-Ing. Ayman Ayad,
Vitesco Technologies GmbH // Dipl.-Ing. Ralf Eckhardt,
Texas Instruments

3B // Reliability

Room K3 // Session chair: Guido Schütte, HELLA GmbH & Co. KGaA +
Dipl.-Ing. Peter Schmitz, (formerly) Ford Research and
Innovation Center Aachen

Marvin Becker, Volkswagen AG // Benedikt Köberlein, BMW AG //
M. Sc. Marvin Rübartsch, TU Dortmund

10:40 | Coffee break + Poster session

11:00 | Session 4

4A // New Technologies

Plenary hall // Session chair: Dipl.-Ing. Manuel Gärtner, STMicroelectronics Application GmbH + Dr.-Ing. Vera Lauer, Mercedes-Benz AG

Mark Nils Münzer, Infineon Technologies AG // Andrea Russo, STMicroelectronics // Haris Muhedinovic, Vicor Corporation

4B // Testing & Diagnosis

Room K3 // Session chair: Prof. Dr.-Ing. Mohamed Ayeb, University of Kassel + Dipl.-Ing. Markus Demmerle, Hyundai Motor Europe Technical Center GmbH

Dipl.-Wirt.-Ing. Julian Saele, dSPACE GmbH // Ph.D. Filippo Bonaccorso, STMicroelectronics // Dipl.-Ing. Markus Plöger, dSPACE

12:30 | Lunch + Coffee break

14:00 | Overview 2

2A // Non-Road Powertrains

Plenary hall // Session chair: Dipl.-Ing. Roland Matthé, Stellantis N.V.

Development of a modular electric drive system for Off-Highway applications

Thomas Brehmer, DEUTZ AG

2B // Battery Supply Chain

Room K3 // Session chair: Prof. Dr. rer. nat. Dirk Uwe Sauer, RWTH Aachen University | ISEA

LFP battery cells made in Europe – a matter of course in the future or not feasible? Opportunities and challenges of a domestic LFP supply chain

Ines Miller, P3 group GmbH

14:30 | Session 5

5A // Low Voltage Power Supply

Plenary hall // Session chair: Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group + Prof. Dr.-Ing. Hans-Georg Herzog, TU Munich

Christoph Schulz-Linkholt, Infineon Technologies // Dr. Christina Antonius, Clarios // Lilly Han, Shanghai Azureve Technologies Co., Ltd.

16:00 | Summary and farewell

Plenary hall

Dr.-Ing. Carsten Hoff, dSPACE GmbH
Dipl.-Ing. (Univ.) Ottmar Sirch, BMW Group

16:10 | End of Conference



You can find the detailed agenda online at
eehe.de/en/agenda

Conference chairs

The chairs for the International Conference **eehe 2024** are:



Dipl.-Ing. (Univ.) Ottmar Sirch

BMW Group

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Dr.-Ing. Carsten Hoff

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Scientific Advisory Board and Program Committee

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Dr.-Ing. Vera Lauer

Mercedes-Benz AG

Dr.-Ing. Jan Lichtermann

Robert Bosch GmbH

Dr.-Ing. Anatoliy Lyubar

Vitesco Technologies GmbH

Dipl.-Ing. Roland Matthé

Stellantis N.V.

Dr. rer. nat. Hartmut Pröbstle

BMW Group

Dr.-Ing. Tomas Reiter

Infineon Technologies AG

Prof. Dr. rer. nat. Dirk Uwe Sauer

RWTH Aachen University | ISEA

Dipl.-Ing. Peter Schmitz

Ford Research & Innovation

Center Aachen

Guido Schütte

HELLA GmbH & Co. KGaA

Dr.-Ing. Marc Thele

Dr. Ing. h. c. F. Porsche AG

Dipl.-Ing. Thomas Weber

Mercedes-Benz AG



Who should take advantage of the conference?

The engaging agenda of the eehe Conference targets experts, managers, and scientists, as well as students engaged in vehicle electrification. It is a vital event for manufacturers, suppliers, development partners, and personnel from universities and research institutions, making it a must-attend gathering:

- architectures and components for electrification, on-board energy networks, on-board systems and components
- electric charging with infrastructure
- electrical energy management
- low-voltage storage
- battery management
- power electronics
- E/E systems in the field of motor vehicles and commercial vehicles

Book your stand at the exhibition

We anticipate that the trade exhibition for **eehe 2024** will fill up rapidly. Therefore, we encourage you to promptly secure your exhibition stand by registering in advance. You can also find details about our promotional media for the conference in the order form.

Join the exhibition and present your company, products and services.



More information and the order sheet
eehe.de/en/exhibition-3



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Host



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45127 Essen / Germany

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Speaker (not Keynote or Overview presenter)	545,00 €
Students (up to Master's degree with proof)	245,00 €



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