PRELIMINARY PROGRAM AS OF 23 SEPTEMBER 2023

Important: This preliminary program is subject to changes. It is strongly recommended to check back regularly.
## TIMETABLE 7TH E-MOBILITY INTEGRATION SYMPOSIUM

### MONDAY, 25 SEPTEMBER 2023

<table>
<thead>
<tr>
<th>Time</th>
<th>Room S09</th>
<th>Room S01</th>
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<tbody>
<tr>
<td>08:00</td>
<td>FOYER LOUNGEN</td>
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<td>REGISTRATION</td>
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<tr>
<td>09:00</td>
<td>ROOM S09</td>
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<tr>
<td>09:00</td>
<td>OPENING: WELCOME AND INTRODUCTION</td>
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<tr>
<td>09:20</td>
<td>SESSION 1: KEYNOTE SESSION</td>
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<td>11:00</td>
<td>GROUP PHOTO + COFFEE BREAK (30 MIN)</td>
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<tr>
<td>11:30-13:20</td>
<td>SESSION 2A: PROJECT EXPERIENCE I</td>
<td>SESSION 2B: SMART CHARGING I</td>
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<tr>
<td>13:20-14:20</td>
<td>LUNCH (60 MIN)</td>
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<tr>
<td>14:20-16:00</td>
<td>SESSION 3A: ANCILLARY SERVICES</td>
<td>SESSION 3B: SMART CHARGING II</td>
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<td>16:00-16:20</td>
<td>COFFEE BREAK (20 MIN)</td>
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<tr>
<td>16:20-17:55</td>
<td>SESSION 4A: PROJECT EXPERIENCE II</td>
<td>SESSION 4B: DISTRIBUTION GRID ASPECTS</td>
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<tr>
<td>18:00-18:45</td>
<td>SESSION 5: PODIUM DISCUSSION &amp; CLOSURE</td>
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<td>18:45</td>
<td>POSTER &amp; NETWORKING RECEPTION (FOYER LOUNGEN)</td>
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**MONDAY, 25 SEPTEMBER 2023**

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<tr>
<th>Time</th>
<th>Session</th>
<th>Description</th>
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<tbody>
<tr>
<td>08:00 – 09:00</td>
<td>Registration</td>
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<tr>
<td>09:00 – 09:20</td>
<td>Welcome</td>
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<tr>
<td>09:20 – 11:00</td>
<td>SESSION 1 – KEYNOTE SESSION</td>
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<tr>
<td>&gt; Session Chair</td>
<td>Thomas Ackermann (Energynautics, Germany)</td>
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<tr>
<td>09:20 – 10:40</td>
<td>Presentations (20 min. each)</td>
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<tr>
<td>• Ten Years with EVs in Denmark – Where Did we Come from and Where Did it Take us? Kathrine Fjendbo Jørgensen (Capital Region of Denmark, Denmark)</td>
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<tr>
<td>• State of Smart Charging and Vehicle-to-Grid in Europe Christopher Hecht (The Mobility House</td>
<td>RWTH Aachen University</td>
<td>JARA-Energy, Germany) (Submission-ID EMOB23-94)</td>
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<td>• Flexibility Services from EVs: Lessons Learned with the PowerBank Technology Alex Iriondo (Monta, Denmark)</td>
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<td>• From V2G to V1G and Back – a Journey through Smart Charging Projects Mattia Marinelli (DTU – Technical University of Denmark, Denmark)</td>
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<td>10:40 – 11:00</td>
<td>Discussions</td>
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<td>11:00 – 11:30</td>
<td>GROUP PHOTO + COFFEE BREAK</td>
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<td>11:30 – 13:20</td>
<td>SESSION 2A – PROJECT EXPERIENCE</td>
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<td>11:30 – 13:00</td>
<td>Presentations (18 min. each)</td>
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<td>• EV Mobility Diffusion and Future Perspectives in the EU: Results from the FLOW Project M. Secchi (DTU – Technical University of Denmark, Denmark), A. Ivanova, J. Eichman (IREC – Institute for Energy Research of Catalunya, Spain) (Submission-ID EMOB23-198)</td>
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<td>• Field Test of a Battery Electric Logistics Fleet: Results from a Field Test and Comparison of Different Charging Strategies L. Ebbert, G.-L. Di Modica, B. Engel (TU Brunswick, Germany) (Submission-ID EMOB23-188)</td>
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<td>• Mathematical DC Charger Model Considering Grid- and EV-Side Parameters and their Influence A. Stadler, F. Grumm (Helmut Schmidt University/University of the Bundeswehr Hamburg, Germany), J. Brombach, K. Rieger, D. Liebig (Shell Global Solutions, Germany), D. Schulz (Helmut Schmidt University/University of the Bundeswehr Hamburg, Germany) (Submission-ID EMOB23-201)</td>
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<td>• Test Device for in-Field Validation of Grid-Friendly Controlled Electric Vehicle Supply Equipment in AC/Mode 3 and DC/Mode 4 Charging L. Baum, A. Stadler, S. Darvish, D. Schulz (Helmut Schmidt University/University of the Bundeswehr Hamburg, Germany) (Submission-ID EMOB23-190)</td>
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<td>• Application of Electric Vehicle Charging Station for Power Factor Correction of Industrial Load A. Nath, Z. Rather (Indian Institute of Technology Bombay, India) (Submission-ID EMOB23-85)</td>
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<tr>
<td>13:00 – 13:20</td>
<td>Discussions</td>
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### SESSION 2B – SMART CHARGING I

**Session Chair:** Eckehard Tröster (Energynautics, Germany)

11:30 – 11:30: Presentations (18 min. each)

- **PV Charging at Company Car Park: Investigation of Future Use, and Resulting Charging Requirements**
  D. Huschenhöfer, J. Petzschmann, J. Binder (Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW), Germany), M. Pawellek (Eltroplan Engineering, Germany) (Submission-ID EMOB23-202)

- **Integration of Flexible Charging Processes of Battery Electric Vehicles in Transmission Grid Congestion Management**
  M. Teodosic, S. Kammerer, J. Peper, C. Rehtanz (TU Dortmund University, Germany) (Submission-ID EMOB23-44)

- **Dynamic Pricing Models for Regionally Generated PV Electricity Based on Artificial Intelligence**
  J. Holzinger, J. Rößler, C. Neufeld, C. Lecon, A. Nagl (Aalen University, Germany), K. Bozem (bozem | consulting associates | munich, Germany), A. Ensinger (Überlandzentrale Wörth/i.-Altheim Netz AG, Germany) (Submission-ID EMOB23-64)

- **Measurement of ICT Latency and Full Activation Time for Fast Demand Response of Electric Vehicle Charging**
  M. Imanaka, H. Baba, K. Ogimoto (The University of Tokyo, Japan) (Submission-ID EMOB23-93)

- **Smart EV Charging with Event Driven Tariffs in the German Smart Meter Infrastructure**
  C. Kübler (Biberach University of Applied Sciences, Germany), E. Niehs (TU Brunswick, Germany), M. Grandel (Biberach University of Applied Sciences, Germany), B. Engel (TU Brunswick, Germany) (Submission-ID EMOB23-16)

11:30 – 11:30: Discussions

### 13:20 – 14:20 LUNCH BREAK

### SESSION 3A – ANCILLARY SERVICES

**Session Chair:** Peter-Philipp Schierhorn (Energynautics, Germany)

14:20 – 15:40 Presentations (20 min. each)

- **Providing Grid Services with an Electric Car-Sharing Fleet – A Swiss Case Study**
  B. Barahona, S. Nowak, M. Friedli, B. Bowler, A. Papaemmanouil (Lucerne University of Applied Sciences and Arts, Switzerland) (Submission-ID EMOB23-196)

- **Integration of Electric Fleet Virtual Power Plants in Energy Markets**
  K. Schert (SAP, Germany), Z. Nochta (Karlsruhe University of Applied Sciences, Germany) (Submission-ID EMOB23-104)

- **Investigation of Parameters Impacting the Energy Consumption of Electric Buses**
  A. Jahic (Helmut Schmidt University/University of the Bundeswehr Hamburg, Germany), R. Soliman (Hamburger Hochbahn AG, Germany), M. Eskander, M. Plenz, E. Avdevicius, D. Schulz (Helmut Schmidt University/University of the Bundeswehr Hamburg, Germany) (Submission-ID EMOB23-19)

- **Planning and Assessment of E-Car Smart Charging with User Preferences**
  M. Noor, G. Engelbrecht, D. Valerio, E. Fuchs, A. Einfalt (Siemens, Austria) (Submission-ID EMOB23-195)

15:40 – 16:00 Discussions

### SESSION 3B – SMART CHARGING II

**Session Chair:** Bernd Engel (TU Brunswick, Germany)

14:20 – 15:40 Presentations (20 min. each)

- **Survey of Smart Charging Algorithms**
  A. Rutgers (ChargeSim BV, Netherlands) (Submission-ID EMOB23-152)

- **Vertical Stakeholder Analysis of Charging an Electric Car Within the EV Charging Journey from Domestic Charging to Company Charging with Various Energy-Economic and Technical Framework Conditions.**
  J. Eickelmann (PION Technology AG, Germany), B. Engel (TU Braunschweig, Germany) (Submission-ID EMOB23-173)

- **Online Optimization of a Workplace Electric Vehicle Charging Station under Grid Constraints**
  A. Malkova, J. M. Zepter, M. Marinelli (DTU – Technical University of Denmark, Denmark) (Submission-ID EMOB23-203)

- **Charging Infrastructure at Rest Areas for Battery Long-Haul Trucks: A Load Modelling Approach**
  F. Otteny (University of Stuttgart, Germany), L. Mauch, F. Klausmann, A.-L. Klingler (Fraunhofer IAO, Germany) (Submission-ID EMOB23-96)

15:40 – 16:00 Discussions
### 16:00 – 16:20  COFFEE BREAK

### SESSION 4A: PROJECT EXPERIENCE II

**Session Chair**
Andrew Rutgers (ChargeSim, Netherlands)

**16:20 – 17:55 Presentations (15 min. each)**

- **Practical Experience in Implementing a Smart Control Algorithm for Secure EV Charging**
  D. Masendorf, N. Rhein, P. Henzel, R. Alsayyed, S. Hempel, T. Schlößer (Energynautics, Germany) (Submission-ID EMOB23-181)

- **Short Term Net Load Forecasting Using Computational Intelligence Techniques**
  I. Habou Laouali, N. Italiano, Â. Casaleiro, I. Alvite, N. Pinho da Silva (R&D Nester, Portugal) (Submission-ID EMOB23-52)

- **Unlocking the Potential of Electric Vehicles in Brazil: Addressing Grid Integration, Collaborative Approaches and Policy Recommendations**

- **Solar PV and Second Life Batteries Powered EV Charging Station: Case Study for India**
  A. Ramanan, M. Sekhar, S. Mehra (GIZ, India) (Submission-ID EMOB23-205)

- **Wireless Recharging System for EV’s – “e-Charging”**
  R. Junior, B. Fajardo, T. Peixoto (Eletrobras, Brazil) (Submission-ID EMOB23-207)

**17:35 – 17:55 Discussions**

### SESSION 4B: DISTRIBUTION GRID ASPECTS

**Session Chair**
Thomas Ackermann (Energynautics, Germany)

**16:20 – 17:35 Presentations (15 min. each)**

- **Distribution Network Optimal Operation with Electric Vehicles**
  F. Marascuolo, G. Forte, M. Dicorato (Politecnico di Bari, Italy) (Submission-ID EMOB23-191)

- **Presenting the Project SekQuaSens³: Combining a Networked Sensor Concept with Model-Based Decisions for Optimized Energy Flow in a District**
  N. Reininghaus, M. Kröner (German Aerospace Center – Institute of Networked Energy Systems, Germany), T. Schneider (German Aerospace Center – Institute of Vehicle Concepts, Germany), K. Waiz (German Aerospace Center – Institute of Solar Research, Germany), Y.-P. Flötteröd (German Aerospace Center – Institute of Transportation Systems, Germany), M. López Diaz (German Aerospace Center – Institute of Transport Research, Germany), R. Nippold (German Aerospace Center – Institute of Transportation Systems, Germany), M. Vehse (German Aerospace Center – Institute of Networked Energy Systems, Germany) (Submission-ID EMOB23-48)

- **Design Comparative Analysis of Distributed and Concentrated Electrical Power Conversion Systems for Multi-Slot Ultra-Fast Chargers**
  P. Franzese, M. Ribera, D. Iannuzzi (University of Naples Federico II, Italy) (Submission-ID EMOB23-204)

- **Towards a Short-Term Forecasting Framework to Efficiently Charge Company EV fleets**
  S. Gohlke, Z. Nochta (Karlsruhe University of Applied Sciences, Germany) (Submission-ID EMOB23-103)

- **Protective Measures for SPD in DC Chargers for BEV**
  F. Grimm (Helmut-Schmidt-University/University of the Bundeswehr Hamburg, Germany), T. Böhm, R. Brocke (DEHN SE, Germany), D. Schulz (Helmut-Schmidt-University/University of the Bundeswehr Hamburg, Germany) (Submission-ID EMOB23-193)

**17:35 – 17:55 Discussions**
18:00 – 18:40

SESSION 5 – CLOSING SESSION

> Session Chair

Eckehard Tröster (Energynautics, Germany)

18:00 – 18:40

VEHICLE-TO-GRID – A TECHNOLOGY THAT IS BECOMING THE STANDARD?

- Panelists:
  - Christopher Hecht (The Mobility House | RWTH Aachen University | JARA-Energy, Germany)
  - Debra Lew (ESIG, USA)
  - Mattia Marinelli (DTU – Technical University of Denmark, Denmark)
  - Zakir Rather (Indian Institute of Technology Bombay, India)
  - Yoh Yasuda (Kyoto University, Japan)

18:40 – 18:45

Closure

18:45 – 21:00

POSTER & NETWORKING RECEPTION

POSTER PRESENTATIONS

- Convolutional Neural Network Battery Pack Classification – Gramian Angular Field vs. Markov Transition Field
  H. Andersen, K. Paasch (University of Southern Denmark, Denmark) (Submission-ID EMOB23-4)

- The Challenges of Traffic Surveys in the Context of E-Vehicle Power Consumption Analysis
  L. Casey, R. Otto, V. Weiler, L. Gaspers, B. Schröter (University of Applied Sciences Stuttgart, Germany) (Submission-ID EMOB23-65)

- Electron Tank as the Mother of Future Energy
  Gh. Saleh (Saleh Research Centre, Netherlands) (Submission-ID EMOB23-117)

- Conception of an Electric Tractor for Farming in Sub-Saharan Africa
  K. Götz, C. Pizzinini (Technical University of Munich – TUM, Germany), J. Strauss (Stellenbosch University, South Africa), S. Tennakoon (Carnegie Mellon University Africa – CMU, Rwanda), M. Menelaos, T. Booyens (Stellenbosch University, South Africa), M. Lienkamp (Technical University of Munich – TUM, Germany) (Submission-ID EMOB23-197)

- Assessment of Bus Depot Infrastructure under Various Uncertainties to Maximize System Reliability
  M. Eskander, A. Jahic, E. Avdevicius, D. Schulz (Helmut Schmidt University/University of the Bundeswehr Hamburg, Germany) (Submission-ID EMOB23-206)

- AI Prediction of Energy Consumption for a Regional Renewables Power Market Place
  C. Lecon, J. Rößler, J. Holzinger, C. Neufeld, A. Nagl (Aalen University, Germany), K. Bozem (bozem | consulting associates | munich, Germany), A. Ensinger (Überlandzentrale Wörth/I.-Altheim Netz AG, Germany) (Submission-ID EMOB23-216)

WANT TO GET INVOLVED IN THE DISCUSSION?
SEND YOUR QUESTIONS TO THE SESSION CHAIR VIA SLIDO

To ask your question, select the session room you are currently in:
A-Sessions or B-Sessions