### Schedule

**Where:** Ulmenliet 20, Hamburg. Room S3.05  
**When:** 17.11.2022, 10 a.m.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:00</td>
<td>Welcome &amp; Intro</td>
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<tr>
<td>10:15</td>
<td>Panel 1 - Pitches: Each presenter pitches their work to the audience</td>
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<tr>
<td>10:40</td>
<td>Panel 1 – Grid Integration</td>
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<tr>
<td>12:00</td>
<td>Challenges and Solutions for the Analysis and the De-risking of Large-Scale Converter System Including Realtime Demonstration Carsten Heising from Avasition</td>
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<td>12:30</td>
<td>Lunch</td>
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| 13:30   | Hydrogen at EWE  
          Business field: Large-scale storage and hydrogen  
          Wilko Heitkötter and Michael Claußner from EWE GASSPEICHER GmbH |
| 14:00   | Panel 2 - Pitches: Each presenter pitches their work to the audience |
| 14:30   | Panel 2 – Role of Hydrogen in Local Energy Systems                   |
| 16:00   | Discussion round                                                     |
| 16:45 – 17:00 | Summary & Closing                                                   |
Panel 1

Øystein Ulleberg, Chief Scientist, Institute for Energy Technology (IFE)

Off-Grid Solar PV-Wind Power-Battery-Alkaline Water Electrolyzer Plant: Simultaneous Optimization of Component Capacities and System Control
Alejandro Ibanez Rioja, researcher at Lappeenranta-Lahti University of Technology (LUT)
Pietari Puranen, researcher at Lappeenranta-Lahti University of Technology (LUT)

Optimizing Electrolyzer Performance in a Dynamic Energy Landscape: Modeling, Scenarios, and Sustainability
Aruna Chandrasekar, researcher at Electric Power Research Institute (EPRI)

Analysis of Regulation through Economic Model Predictive Control of Hydrogen-Based Energy Storage Systems
Marina Nascimento Souza, researcher at Fraunhofer IWES

In Search for a High-Performance Modeling Framework for Electrolyzers
Torben Warnecke, researcher at DESY

Improved Integration of Electrolyzers by Grid-forming Battery Systems in Weak Grids
Christoph Kaufmann, researcher at Fraunhofer IWES

Panel 2

Power Converters for H2 Applications and Providing Grid Services
Mohammadhossein Tavanaee, PhD candidate at the Universitat Politècnica de Catalunya (UPC)

A Multilinear Model of a Grid-following Converter
Christoph Kaufmann, researcher at Fraunhofer IWES

Standards for the Grid Integration of Hydrogen Infrastructure
Jannes Vervoort, researcher at Fraunhofer IWES

Simultaneous Optimal Dispatch and Sizing of Local Energy Systems
Georg Pangalos, researcher at Fraunhofer IWES

An Approach to Multi-energy Network Modelling by Multilinear Models
Leandro Samaniego, researcher at the HAW