

# DACH+ Energy Informatics 2025: Program Schedule

## Wednesday 17th September:

RWTH Aachen (IAEW) / Fraunhofer Center Digital Energy, Hüttenstr 5, 52068 Aachen	8:30 – 9:00	<b>Check-in</b>
	9:00 – 12:00	<b>Doctoral Workshop Energy Informatics</b> PhD students discuss their research work (by invitation) <b>Technical Workshop 1</b> <i>Unlocking Potential: Data Spaces in the Energy Sector</i> Fraunhofer IEE <b>Technical Workshop 2</b> <i>OpenEnergyTwin: Advancing Research on Modular Control Systems</i> OFFIS Institute for Information Technology, Fraunhofer FIT, RWTH Aachen University
	12:00 – 13:30	<b>Lunch break &amp; Laboratory Tour</b>
	13:30 – 16:30	<b>Doctoral Workshop Energy Informatics</b> PhD students discuss their research work (by invitation) <b>Technical Workshop 3</b> <i>Exploring the Energy Research Process</i> Carl von Ossietzky University, FAU Erlangen Nürnberg, OFFIS Institute for Information Technology <b>Technical Workshop 4</b> <i>SGAM Toolbox – Smart EV Charging</i> FH Salzburg – Josef Ressel Centre
La Fabrik, Bachstraße 20, 52066 Aachen	18:30	<b>Welcome Reception</b>

## Thursday 18th September:

forum-M, Buchkremerstraße 1-7, 52062 Aachen	8:30 – 9:00	<b>Check-in</b>
	9:00 – 9:15	<b>Welcome Speech</b>
	9:15 – 10:00	<b>Key Note</b> tba
	10:00 – 11:00	<b>Session 1: Computation &amp; Communication</b> <i>Understanding the Diversity of Communication Scenarios in Cyber-Physical Energy Systems</i> Malin Radtke and Sebastian Lehnhoff Carl von Ossietzky Universität  <i>Sats4Power: Design and Simulation of LEO Satellite Communication Networks for Reliable Monitoring and Control in Power Systems</i> Anna Volkova, Julian Schmidhuber, Hermann de Meer, Robin Hess, Klaus Schilling, Anatoli Wellhoefer and Markus H. Zink University of Passau  <i>Accelerating Power Flow Calculations via Constant Jacobian Structure</i> Mehmet Alper Kuyumcu, Catalin Gavrilita and Andrea Benigni Austrian Institute of Technology

11:00 – 11:30	<b>Coffee break</b>
11:30 – 12:30	<b>Session 2: Data Science</b> <i>Inferring the Hidden: Privacy Risks of Microaggregation in Smart Meter Data</i> Dejan Radovanovic, Joaquin Delgado Fernandez, Maximilian Schirl, Günther Eibl, Andreas Unterweger and Sergio Potenciano Menci Center for Secure Energy Informatics, Salzburg University of Applied Sciences  <i>Large-Scale Processing and Validation of Grid Data for Assessing the Fair Spatial Distribution of PV Hosting Capacity</i> Ali Mohamed Ali, Yaser Raesi, Plouton Grammatikos, Davide Pavanello, Pierre Roduit and Fabrizio Sossan HES-SO VALAIS  <i>Seasonal and weather influences in the outages of German thermal generators</i> Chiara Fusar Bassini Hertie School
12:30 – 13:30	<b>Lunch Break</b>
13:30 – 14:30	<b>Session 3: Markets</b> <i>Directional Price Forecasting in the Continuous Intraday Market under Consideration of Neighboring Products and Limit Order Books</i> Timothée Hornek, Sergio Potenciano Menci and Ivan Pavić University of Luxembourg  <i>Electricity-Aware Bid Format for Coordinated Heat and Electricity Market Clearing</i> Lesia Mitridati, Jalal Kazempour and Pascal Van Hentenryck Technical University of Denmark  <i>A Lightweight and Modular Simulation Framework for Prototyping and Evaluating Electricity Trading Strategies Under Different Market-Clearing Mechanisms</i> Talwinder Singh and Ehimare Okoyomon Technical University of Munich
14:30 – 15:40	<b>Poster Presentations &amp; Coffee Break</b>
15:40 – 17:00	<b>Session 4: Planning &amp; Optimization</b> <i>Automated Greenfield Planning of optimized Low Voltage Distribution Networks with Street-Side Differentiation</i> Eric Schulze Berge, Wiebke Gerth, Marius Güths and Markus Zdrallek University of Wuppertal  <i>Process Mining for Robust Heat Integration through Process- and Product-Centric Energy Demand Modeling</i> David Zapata Gonzalez, Katharia Brenntag, Kay Benkert, Florian Schlosser and Oliver Müller Paderborn University  <i>Regional Differences in the Determinants of Residential Photovoltaic Expansion: A Spatial Econometric Analysis of Germany and Italy</i> Max Beihofer and Lenard Rude

		Albert-Ludwigs-Universität Freiburg
		<i>Modeling and Impact of Flexible AC Distribution Systems in Medium-Voltage Grids</i>
		Maxim Müllender, Julian Saat, David Franck, Szymon Werminski and Andreas Ulbig
		IAEW at RWTH Aachen University
	17:00 – 19:00	<b>City Tour</b>
	19:00	<b>Conference Dinner</b>

## Friday 19th September:

forum-M, Buchkremerstraße 1-7, 52062 Aachen	8:30 – 9:00	<b>Check-in</b>
	9:00 – 10:00	<b>Session 5: AI in Energy Systems</b> <i>Multi-Objective Reinforcement Learning with Shielding for Control and Safety in Power Grids</i> Gökhan Demirel, Simon Grafenhorst, Jakob Ohm, Benjamin Schäfer, Kevin Förderer and Veit Hagenmeyer Karlsruhe Institute of Technology  <i>Reinforcement Learning for Optimized Multi-Use Operation of Battery Energy Storage Systems</i> Steffen Kortmann, Norman Zoller, Sarra Bouchkati, Luis Böttcher and Andreas Ulbig IAEW at RWTH Aachen University  <i>Adaptive Self-Improvement for Smarter Energy Systems using Agentic Policy Search</i> Alexander Sommer, Peter Bazan, Behnam Babaeian, Jonathan Fellerer, Warren Powell and Reinhard German Friedrich-Alexander-Universität Erlangen-Nürnberg
	10:00 – 11:00	<b>Session 6: Load Forecasting &amp; Management</b> <i>Retrofitting Energy IoT Devices in the Residential Sector: Efficient Machine Learning for Day-Ahead Forecasting</i> Dimitrios Papadopoulos and Anke Weidlich University of Freiburg, INATECH  <i>Grid-Aware Space Then Time STGNNs for Multi-Horizon Electricity Load Forecasting</i> Ugochukwu Orji, Çiçek Güven and Dan Stowell Jheronimus Academy of Data Science (JADS), Tilburg University  <i>Probabilistic Prediction of the Area Control Error Using Normalizing Flows</i> Pablo Mayer, Carsten Hartmann, Eike Cramer, Manuel Dahmen and Dirk Witthaut Institute of Climate and Energy Systems, Forschungszentrum Jülich; Institute for Theoretical Physics, University of Cologne
	11:00 – 11:30	<b>Coffee Break</b>

11:30 – 12:30	<b>Session 7: Heating &amp; Cooling Technologies</b> <i>Heterogeneity in Temperature Sensitivity of Building Energy Use for Space Heating</i> Nicolai-Alexander Löwenberg, Moritz Wussow, Simon Albrecht and Dirk Neumann University of Freiburg  <i>Data Driven Modeling of the Ramp-Up of Electric Heating Systems</i> Paul Maximilian Röhrig, Julius Zocher, Oliver Banovic, Julian Bigalke and Andreas Ulbig IAEW at RWTH Aachen University  <i>Evaluating the efficiency of fifth-generation district heating and cooling using sector-coupled co-simulation</i> Jonas Scherthaner, Dominik Vereno, Maximilian Lugmair, Markus Leeb and Christian Neureiter Josef Ressel Centre for Dependable System-of-Systems Engineering, Salzburg University of Applied Sciences
12:30 – 13:10	<b>Session 8: Advanced Image Processing</b> <i>Evaluation and Application of Transformer Architectures for Image-Based Detection and Localization of Damage to Wind Turbines</i> Moritz Hass and Ammar Memari Jade Hochschule Wilhelmshaven  <i>Development of an Automated AI-Based Detection of Nesting Boxes in the Overhead Line Network of a Transmission System Operator: A YOLOv11 Application for Environmental and Operational Monitoring</i> Hanna Wintersperger, Lukas Hofmann, Tim Schüßler and Prof. Andreas Zeiselmaier Weihenstephan-Triesdorf University of Applied Sciences
13:10 – 13:30	<b>Closing</b>
13:30 – 14:30	<b>Lunch</b>