

# ENERDAY 2023

## The energy crisis as an accelerator of a sustainable transformation?

<b>Pre-Conference-Dinner</b> Informal Get Together	<b>Thursday, 4 May 2023, 6 p.m.</b>	<b>Restaurant Kobers Chiavieri (↗)</b> Bernhard-von-Lindenau Platz 1, 01067 Dresden
<b>Conference venue</b>	<b>Friday, 5 May 2023, 8 a.m. – 5:45 p.m.</b>	<b>HSZ Hörsaalzentrum (↗)</b>

8:00	Registration, Coffee & Tea			
8:30	<b>Opening Address</b> (Room: HSZ/0004/H) Prof. Dr. Dominik Möst, TU Dresden			
9:00 - 9:45	<b>Keynote Talk</b> (Room: HSZ/0004/H, Chair: Prof. Dr. Dominik Möst, TU Dresden) <b>SachsenEnergie – our contribution to the German energy transition</b> Dr. Axel Cunow, Sachsenenergie			
9:45	<b>5 minutes to change rooms</b>			
<b>Parallel Session 1 (09:50 – 10:50)</b>				
09:50 - 10:50	<b>Energy system modeling I</b> Room: HSZ/0004/H, <b>hybrid</b> Chair: Hendrik Scharf Assistant: Simon Koch	<b>Natural Gas I</b> Room: HSZ/0401/H, <b>hybrid</b> Chair: Jens Maiwald Assistant: Niklas Haubold	<b>Hydrogen and flexibility</b> Room: HSZ/0301/U Chair: Steffi Misconel Assistant: Ole Sauerbrey	<b>Renewables and modeling</b> Room: HSZ/0304/Z Chair: Hannes Hobbie Assistant: Aaron Kaspar
09:50	<b>Uncertainty in energy system modeling - lessons from case-studies with GENeSYS-MOD</b>  Karlo Hainsch, <i>Technische Universität Berlin</i>	<b>European Economic Impacts of Cutting Energy Imports from Russia: A Computable General Equilibrium Analysis</b>  Sigit Perdana, <i>EPFL Lausanne</i>	<b>On assessing the value of decentral flexibility given different flexibility deployment and TSO-DSO coordination</b>  Hendrik Kramer, <i>Universität Duisburg-Essen</i>	<b>The insurance value of renewable energies</b>  Thibault Deletombe, <i>Université Paris Dauphine-PSL</i>
10:10	<b>Numerical optimisation of supply security in a cellular-structured district using solid-biomass-based hybrid systems</b>  Lukas Richter, <i>Deutsches Biomasseforschungszentrum</i>	<b>European Gas and LNG Scenarios For Winter 2023/2024 And Beyond</b>  Andreas Schroeder, <i>ICIS – Independent Chemical &amp; Energy Market Intelligence</i>	<b>Hydrogen and Heat Storages as Flexibility Sources for a Greenhouse Gas-Neutral German Energy System</b>  Thomas Schöb, <i>Forschungszentrum Jülich</i>	<b>A novel approach to generate bias-corrected regional wind infeed timeseries based on reanalysis data</b>  Yannik Pflugfelder, <i>Universität Duisburg-Essen</i>
10:30	<b>Sustainable Power Systems Transformation of Industrial Regions: Insights from Energy System Modelling</b>  Sophie Pathe, <i>Ruhr-University Bochum</i>	<b>Europe's independence from Russian natural gas – Effects of a complete import stop on energy system development</b>  Nikita Moskalenko, <i>WIP - Technische Universität Berlin</i>	<b>How much flexibility is needed by hydrogen power plants?</b>  Philipp Hauser, <b>cancelled</b> <i>VNG AG</i>	<b>The effect of coarse weather data resolution on energy system model results</b>  Matthias Zech, <i>DLR – Institut für vernetzte Energiesysteme</i>
10:50	<b>Coffee &amp; tea break – 25 minutes</b>			


**Parallel Session 2 (11:15 – 12:15)**

11:15 - 12:15	<b>Energy system modeling II</b>  Room: HSZ/0004/H, <b>hybrid</b> Chair: Felix Jakob Fliegner Assistant: Simon Koch	<b>Natural Gas II</b>  Room: HSZ/0401/H, <b>hybrid</b> Chair: Maximilian Happach Assistant: Niklas Haubold	<b>Hydrogen and infrastructure</b>  Room: HSZ/0301/U Chair: Lauritz Bühler Assistant: Ole Sauerbrey	<b>PV and storage</b>  Room: HSZ/0304/Z Chair: Lisa Lorenz Assistant: Aaron Kaspar
11:15	<b>Investments in coupled energy sectors and market pricing</b>  Johannes Wirth, <i>FAU Erlangen-Nürnberg</i>	<b>Long-term Development of European Natural Gas Markets - Scenario Analysis using the Global Gas Model (GGM) (<i>online contribution</i>)</b>  Lukas Barner, <i>Technische Universität Berlin</i>	<b>A sector-coupled european energy system towards 2050 - Exploring the role of hydrogen pipeline infrastructure</b>  Jonathan Hanto, <i>Europa-Universität Flensburg / TU Berlin</i>	<b>Smart Energy Protocol Landscape in Germany</b>  Christoph Parsiegla, <b>cancelled</b> <i>P3 Group</i>
11:35	<b>Energy Imports and Infrastructure in a Climate-Neutral European Energy System</b>  Fabian Neumann, <i>Technische Universität Berlin</i>	<b>Could we learn from our mistakes in the past? Comparing gas market forecasts from MAGELAN model with actual developments in reality</b>  Andreas Seeliger, <i>Hochschule Niederrhein</i>	<b>Generation options &amp; effects of sustainable hydrogen from offshore wind energy on the German energy system</b>  Enno Wiebrow, <i>Technische Universität Berlin</i>	<b>Determinants of residential photovoltaic and battery storage adoption in Germany: an empirical investigation</b>  Stephanie Stumpf, <i>KIT – Institute of industrial production</i>
11:55	<b>Green deal and carbon neutrality assessment of Czechia</b>  Lukáš Rečka, <i>Charles University Praha</i>	<b>Expanding natural gas cross-border flows in Europe through the optimal use of the pipeline grid: a stylized model comparison</b>  Christian von Hirschhausen, <i>Technische Universität Berlin</i>	<b>The economics of global green ammonia trade – "Shipping Australian wind and sunshine to Germany"</b>  Kiana Niazmand, <i>FAU Erlangen-Nürnberg</i>	<b>Energy storage as enabler for the transition to a sustainable energy system: what will be the winning battery technology?</b>  Jakob Gross, <b>cancelled</b> <i>P3 Group</i>
12:15 - 13:15	<b>Lunch break – 60 minutes</b>			



Faculty of Business and Economics, Chair of Energy Economics, Prof. Dr. Dominik Möst

13:15 - 14:00	<b>Keynote Talk</b> (Room: HSZ/0004/H, hybrid, Chair: Prof. Dr. Christian von Hirschhausen, TU Berlin) <b>Trends in European and International Gas Markets in the Energy Sector Transformation</b> Prof. Dr. Anne Neumann, NTNU			
14:00	<b>5 minutes to change rooms</b>			
<b>Parallel Session 3 (14:05 – 15:05)</b>				
14:05 - 15:05	<b>Energy system modeling III</b>  Room: HSZ/0004/H, <b>hybrid</b> Chair: Andreas Büttner Assistant: Simon Koch	<b>Smart grid and tariffs</b>  Room: HSZ/0401/H, <b>hybrid</b> Chair: Philipp Riegebauer Assistant: Niklas Haubold	<b>Demand response</b>  Room: HSZ/0301/U Chair: Jannis Eichenberg Assistant: Ole Sauerbrey	<b>Renewables and infrastructure</b>  Room: HSZ/0304/Z Chair: Mario Kendziorски Assistant: Aaron Kaspar
14:05	<b>Exploring the untapped potential of renewables and flexibility options in reducing CO<sub>2</sub> emissions - What will it cost?</b>  Steffi Misconel, <i>EURAC Research</i>	<b>Smart Network Tariffs: Managing Demand Peaks in Residential Electricity Distribution</b>  Roman Hennig, <i>TU Delft</i>	<b>Gas demand in times of crisis: energy savings by consumer group in Germany</b>  Oliver Ruhnau, <i>Hertie School</i>	<b>Potentials of parking and floating photovoltaics in Germany</b>  Rachel Maier, <i>Forschungszentrum Jülich</i>
14:25	<b>Impact of non-linear CO<sub>2</sub> price fluctuations on investments in the power sector</b>  Erdal Tekin, <i>IER University of Stuttgart</i>	<b>Effects of electricity pricing schemes on household energy consumption A meta-analysis of academic and non-academic literature (<i>online contribution</i>)</b>  Tarun Khanna, <i>Mercator Research Institute</i>	<b>The impact of demand-side mitigation measures in German passenger transport on the energy system transformation</b>  Marlin Arnz, <i>Technische Universität Berlin</i>	<b>Solar Prosumage: Interactions with the Transmission Grid</b>  Mario Kendziorски, <i>Technische Universität Berlin</i>
14:45	<b>Navigating to a Greener Europe through Clean Electricity Procurement</b>  Iegor Riepin, <i>Technische Universität Berlin</i>	<b>A methodological approach for developing smart grids - determining main drivers and match appropriate projects to meet local needs</b>  Philipp Riegebauer, <i>BABLE GmbH</i>	<b>The role of dynamic electricity price contracts to utilise residential demand-side response to fight the energy crisis and ease the transformation to a renewable power system</b>  Matthias Hofmann, <i>NTNU / Statnett</i>	<b>Spaghettigrids: Offshore grid development with a geographical information system - First results for Baltic and North Sea</b>  Felix Jakob Fliegner, <i>50Hertz / TU Dresden</i>
15:05	<b>Coffee &amp; tea break – 25 minutes</b>			


**Parallel Session 4 (15:30 – 17:00)**

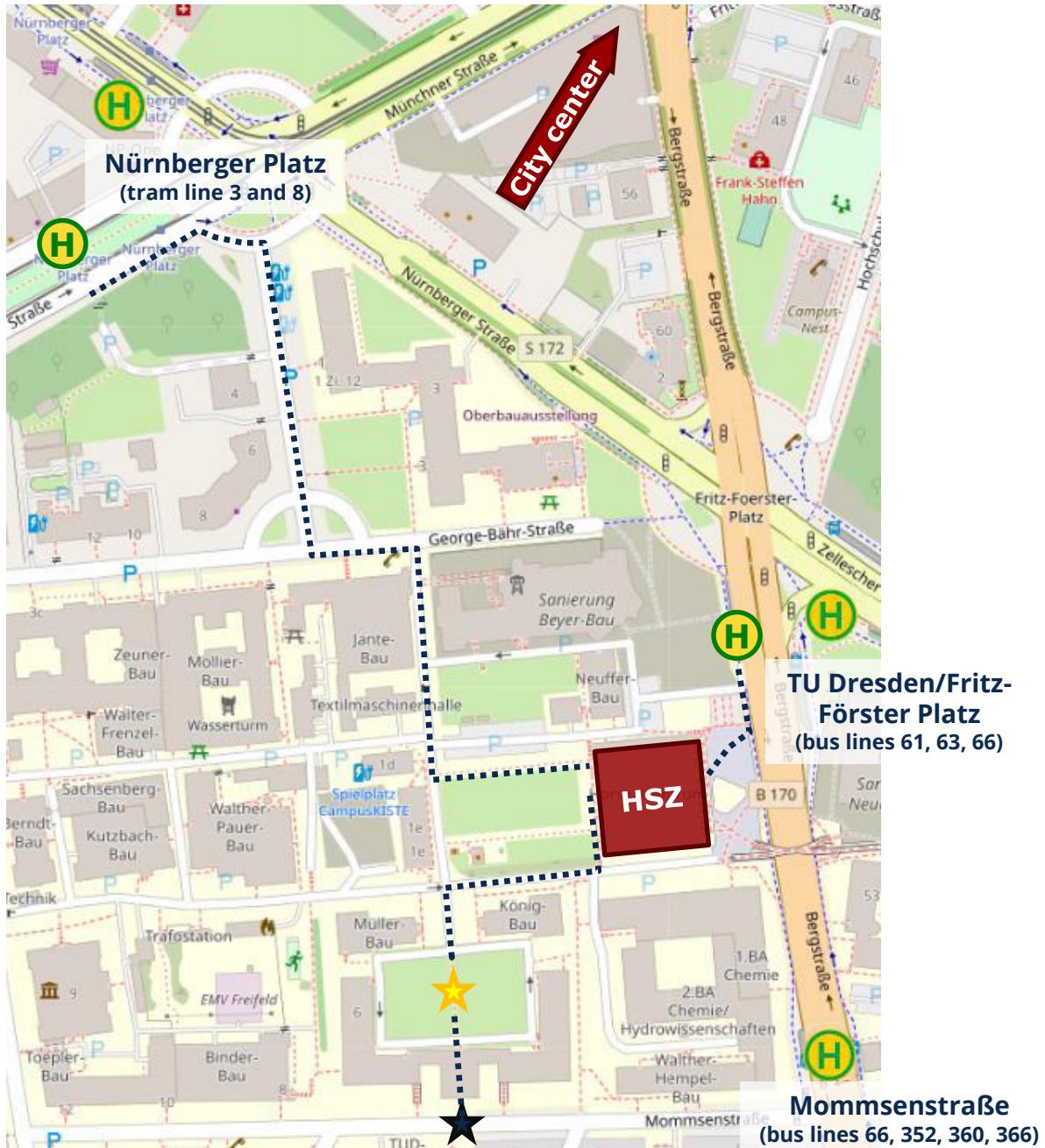
	<b>Energy system modeling IV</b>	<b>Energy transition</b>	<b>Decentralised energy supply</b>	<b>Technology assessment</b>
15:30 - 17:00	Room: HSZ/0004/H, <b>hybrid</b> Chair: Constantin Dierstein Assistant: Simon Koch	Room: HSZ/0401/H, <b>hybrid</b> Chair: Dimitrios Glynnos Assistant: Niklas Haubold	Room: HSZ/0301/U Chair: Lucas de la Fuente Assistant: Ole Sauerbrey	Room: HSZ/0304/Z Chair: Alexander Wimmers Assistant: Aaron Kaspar
15:30	<b>How reduction of energy demand can help to reach or reinforce German mitigation targets</b>  Patrick Jürgens, Fraunhofer ISE	<b>Effects of fuel switching on electricity consumption and greenhouse gas emissions after the Russia–Ukraine War</b>  Yeong Jae Kim, KDI School of Public Policy and Management South Korea	<b>Sustainable municipality modelling: Clustering-based bi-level optimization of a decentralized municipality energy and resource treatment infrastructure portfolio</b>  Matthias Maldet, EEG – Technische Universität Wien	<b>Economics of nuclear power in decarbonized energy systems</b>  Alexander Wimmers, Technische Universität Berlin
15:50	<b>The Industry Transformation from Fossil Fuels to Hydrogen will reorganize Value Chains: Big Picture and Case Studies for Germany</b>  Nima Farhang-Damghani, FAU Erlangen-Nürnberg	<b>Defining green hydrogen: Does simultaneity benefit big players?</b>  Nieves Casas, RWTH Aachen University	<b>Comparison of CO<sub>2</sub> and cost-optimised energy system for a residential building in Germany</b>  André Egli, Hochschule Luzern	<b>Efficient electricity distribution and sustainable energy management through Big Data analytics and machine learning</b>  Andrej Somrak, Troia d.o.o.
16:10	<b>Short Coffee &amp; tea break – 10 minutes</b>			
16:20	<b>Coherent Transformation Paths in Energy System Modelling - A Case Study for Germany</b>  Toni Busch, Forschungszentrum Jülich	<b>Reviewing energy transition studies in the light of recent European gas market developments</b>  Daniel Brunsch, Universität Duisburg-Essen	<b>Modelling district heating systems transition towards climate neutrality, case study of Poland</b>  Maciej Raczyński, AGH University of Science and Technology	<b>Functional Technology Foresight: Case Study for Direct Air Capture and Storage</b>  Freia Harzendorf, Forschungszentrum Jülich
16:40	<b>At the borderline: An analysis of the electricity trade between Mexico and US (<i>online contribution</i>)</b>  Lilia Garcia Manrique, University of Sussex	<b>Demand and Generation in Distribution Grids: Future Challenges and Opportunities</b>  Abhilash Bandam, Forschungszentrum Jülich	<b>Investigation of seasonal congestion situations in modern rural integrated distribution grids</b>  Tom Steffen, Technische Universität Hamburg	<b>Effect of the energy crisis on short-term and long-term market design - an economic assessment</b>  Maxime Amadio, Compass Lexecon
17:00	<b>End of parallel Sessions</b>			
17:30	<b>Group picture in front of the Fritz-Förster Bau (↗)</b>			
17:45	<b>Bus transfer to gala dinner (departing from Mommsenstraße)</b>			
<b>Gala Dinner</b> Official closing event and award ceremony		<b>Friday, 5 May 2023, 18:30 p.m.</b>	<b>Spitzhaus Radebeul (↗)</b> Spitzhausstraße 36, 01445 Radebeul	
23:30	<b>Bus transfer to Dresden central train station (departure from the gala dinner location)</b>			



## ENERDAY 2023

### Venue and floor plan

#### Directions



Tram/Bus stations



Conference location (HSZ - Hörsaalzentrum)



Location for group picture



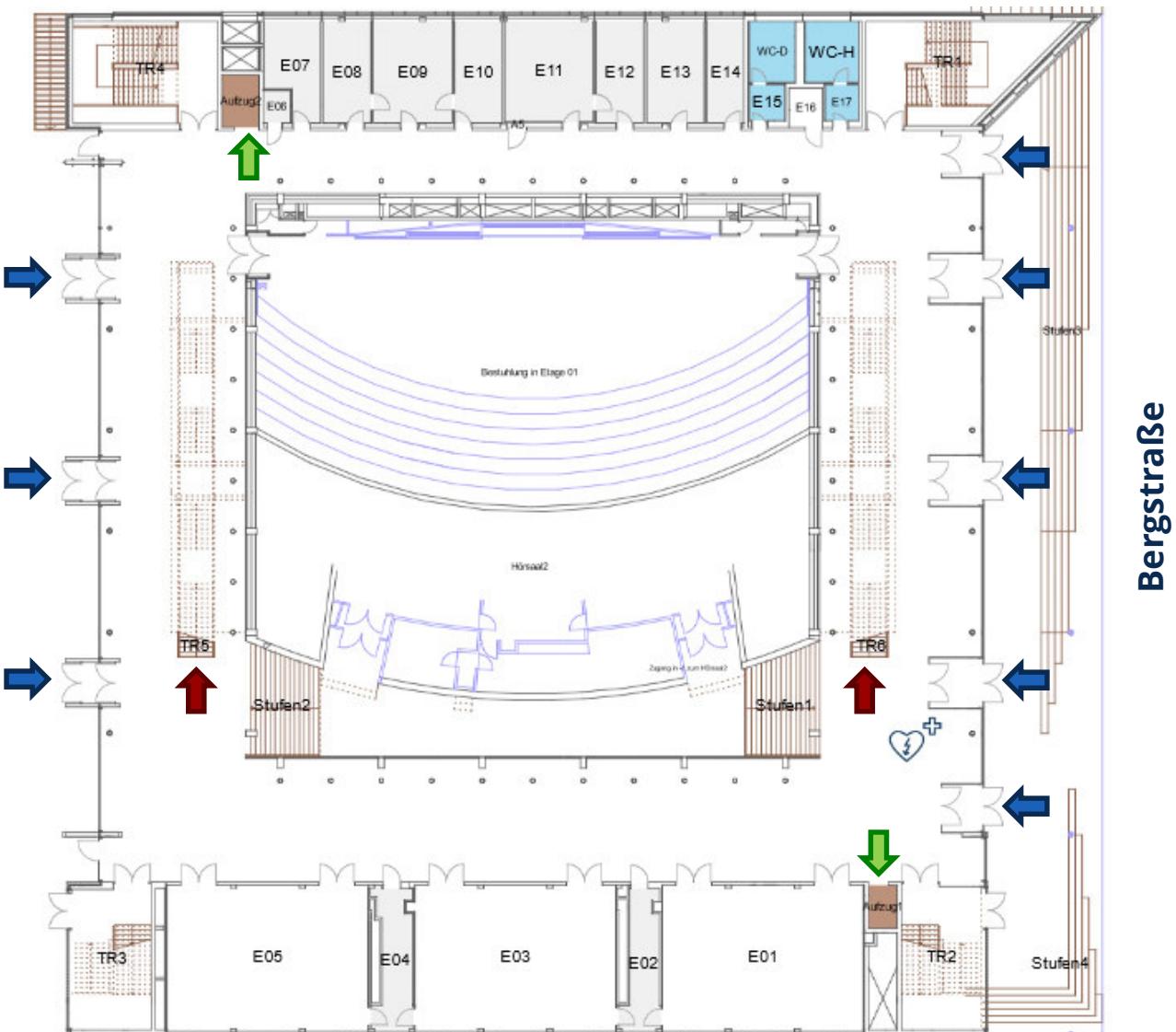
Departure for the gala dinner



## ENERDAY 2023

### Venue and floor plan

Ground floor (building entry)



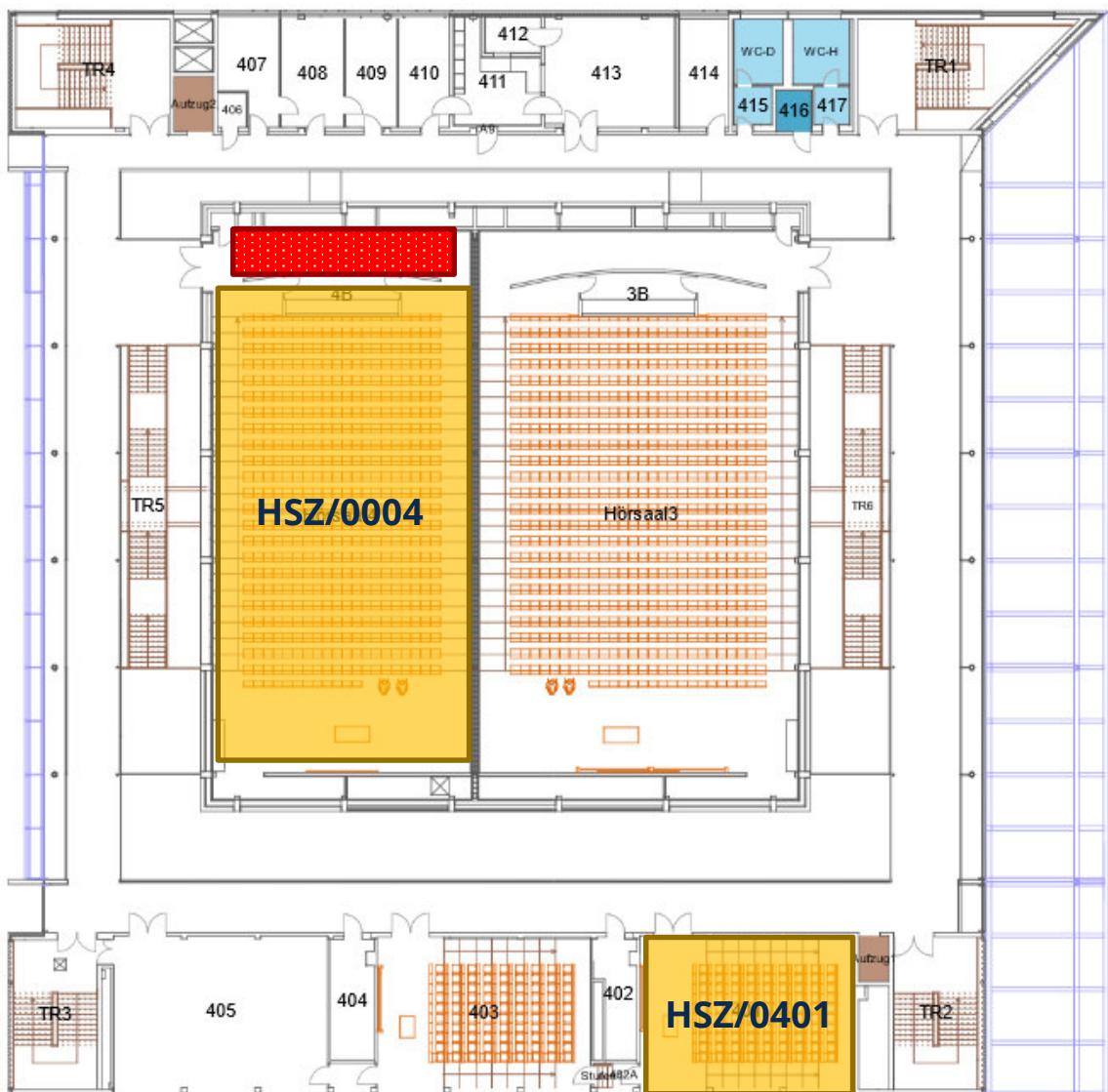
- Building entrances
- Staircase to reach the conference office at the 3<sup>rd</sup> floor
- Elevator



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### Venue and floor plan

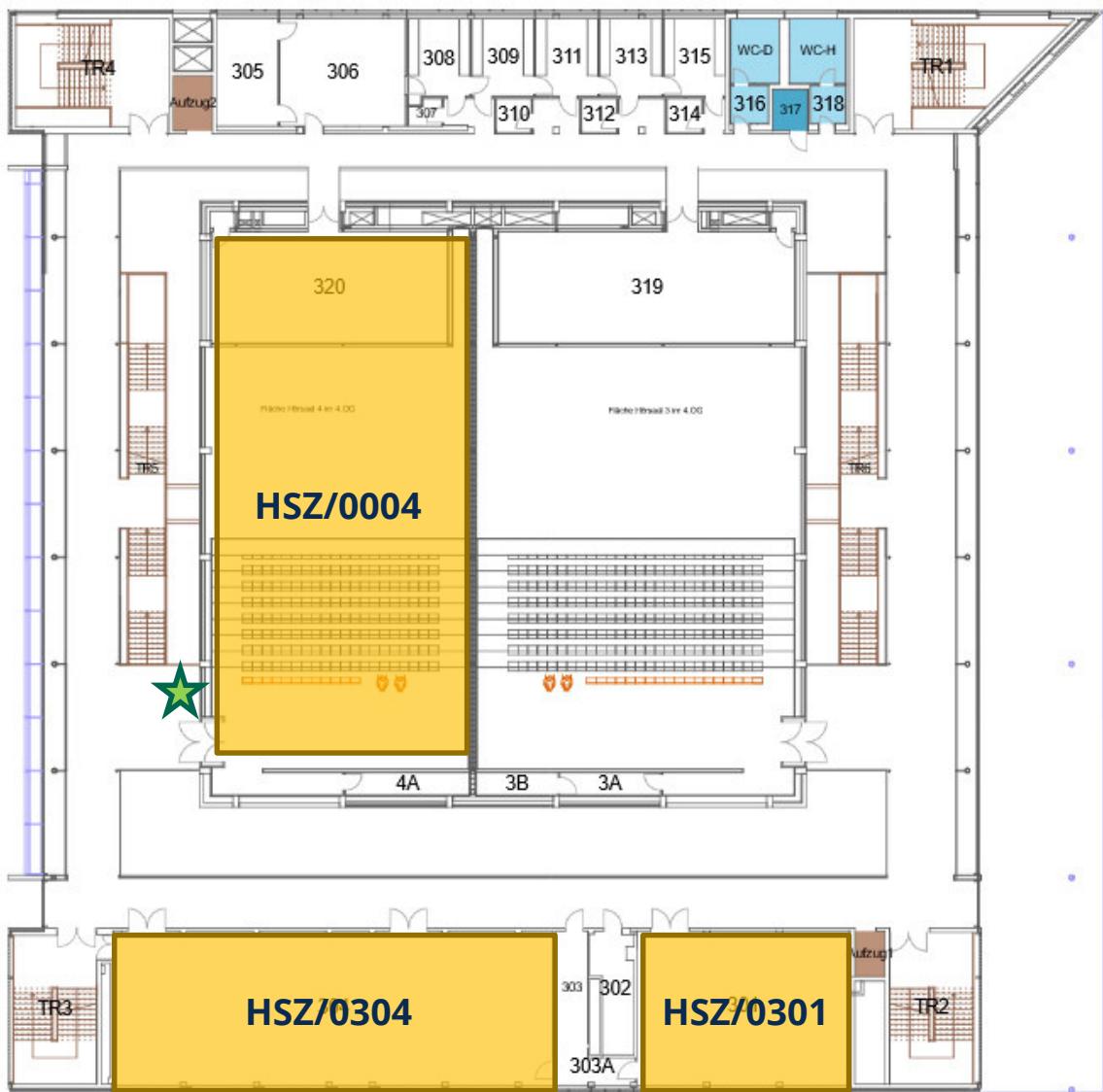
Conference floor – 4<sup>th</sup> floor

Conference Rooms

Wardrobe

## ENERDAY 2023 Venue and floor plan

Conference floor – 3<sup>rd</sup> floor



■ Conference Rooms

★ Conference Office