

# 1<sup>st</sup> WORKSHOP INTEGRATION OF LOCAL ENERGY SYSTEMS

On Friday, 28.10.2022, 9:00 -16:00



Bringing together research and industry to improve the understanding of energy system challenges.

To decarbonize the European energy system, we face challenges in transitioning to decentralized and independent subsystems driven by the integration of power, gas, heat, and transport networks. A significant challenge will be to control such a complex system.

The assumption that currently applied methods for the stable operation of the networks can be incrementally adapted could be structurally wrong. Innovative solutions for modeling and design of the future grid, as well as international cooperation, are essential for success.

This workshop aims to shed light on these future challenges and integrate cutting-edge research into the industry's perspective. Our speakers are leading European experts in power networks, modeling, and control. They will address foreseeable problems scientifically and under the scope of applicability.

We welcome the speakers:

**Oriol Gomis-Bellmunt** (UPC Barcelona)

Towards Power Systems Dominated by Renewable Energy and Power Electronics

**Florian Dörfler** (ETH Zürich)

Data-Enabled Predictive Control in Autonomous Energy Systems

**Jan Lunze** (RU Bochum)

Practical Synchronization of Networked Systems

**Volker Mehrmann** (TU Berlin)

Energy Based Modelling via Port-Hamiltonian Descriptor Systems

**Gerwald Lichtenberg** (HAW Hamburg)

Multilinear Models for Complex Energy Systems

We kindly invite you to join the event online, where you will have the opportunity to be involved in discussions with the speakers, other researchers, and industry representatives. For more information and registration, please follow:



[Information](#)



[Registration](#)