

## **Demand response, mobility and distributed flexibility services**

### **ORGANIZED BY**

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The increasing penetration of renewable energy sources, electrification of end uses, and digitalization of power systems are transforming the operation of electricity networks. In this context, demand response, electric mobility, and distributed flexibility services play a critical role in enabling efficient, resilient, and sustainable energy systems. This special session aims to bring together researchers, practitioners, and policymakers to discuss recent advances, challenges, and innovative solutions related to the activation, coordination, and market integration of distributed flexibility resources.

The session will focus on methodologies, technologies, and frameworks for demand response programs, electric vehicle integration, and flexibility services provided by distributed energy resources, including residential, commercial, and community-scale assets. Topics of interest include, but are not limited to, modeling and optimization of flexible loads, aggregation strategies, local and system-level flexibility markets, interaction with distribution system operators, and the role of digital platforms and communication infrastructures. Special attention will be given to the coupling between mobility and energy systems, exploring smart charging, vehicle-to-grid concepts, and fleet management strategies as enablers of grid flexibility.

