





# Large Scale Systems Week

Forum Finkenau, Finkenau 35, 22081 Hamburg

Monday, 02.12.2024 - Training Day Tuesday, 03.12.2024 - Academia Day Wednesday, 04.12.2024 - Industry Day

Explore the challenges and opportunities presented by large scale energy systems modeling and control with industry experts and academics

#### Please apply until 19.11

application:



LinkedIn:



HAW-Hamburg: Large Scale Systems Week

Large Scale Systems Week | LinkedIn

https://www.haw-hamburg.de/en/go-2-profin/large-scale-systems-week.

GEFÖRDERT VOM



#### **Training Day**

#### **Hands-on Experience with Modeling Tools**

by go-2-prof:in (HAW)

Monday, 02.12.2024

09:00 - 16:00

The Training Day is specifically aimed at students and offers the opportunity to learn about modeling tools in MATLAB and Python through hands-on examples with experts

09:00	Welcome & Intro
09:15	Josep Fanals Batllori (eRoots)  AC/DC power flow aimed at large scale systems
10:45	Coffee Break
11:00	Marcus Wiens (Fraunhofer IWES)  Q-Sim: Modular Large-Scale Simulation Platform
12:30	Lunch
14:00	Gerwald Lichtenberg & Team (HAW/ILES)  Multilinear modeling with the MTI-Toolbox for Matlab



## **Academia Day**

## **Current Challenges**

by go-2-prof:in (HAW)

Tuesday, 03.12.2024

09:00 – 17:30

The Academia Day welcomes experts from academia to discuss the current challenges in large scale systems

09:00	John Lygeros (ETH Zurich) Control of Networked Energy Hubs
10:00	Coffee Break
10:15	Horst Schulte (HTW Berlin) Virtual Aggregation of Distributed Energy Resources by Cascaded Model Reference Adaptive Control
10:45	Nahal Sharafi (DESY) On the Predictability of Dynamical Systems
11:15	Coffee Break
11:30	Arne Speerforck (TUHH) <i>Towards Modeling Large Scale District Heating Networks</i>
12:00	Ahmed Aboudonia (ETH Zurich) Data-driven Train Climate Control
12:30	Lunch
13:30	Panel discussion Challenges and possible Solutions to the Large Scale Energy Systems of Tomorrow
14:30	Closing Words
14:45	Start of Excursion to DESY

## **Industry Day**

#### **Large Scale Systems in Industry**

3<sup>rd</sup> ILES Workshop by Fraunhofer IWES

Wednesday, 04.12.2024

09:00 – 15:00

The Industry Day will explore real-world challenges and opportunities when dealing with large scale systems. The event will particularly highlight modeling and control in industry

09:00	Jan Wenske (Fraunhofer IWES) Welcome & Intro	
09:30	Poster Session	
	Aruna Chandrasekar (EPRI)	
	<ul> <li>Anant Shatrughan Rane (HAW/Aurubis)</li> </ul>	
	Onur Alican (CITCEA UPC)	
	Niklas Riemann (50Hertz)	
	Horst Schulte (HTW Berlin)	
11:00	"Unconference" Poster Session & Discussion of Results	
12:30	Lunch	
13:30	Panel Discussion Industry Roadmap on how to deal with Large Scale Systems	
14:30	Exchange of Ideas during open-ended Coffee Break	