



Friedrich-Alexander-Universität  
Research Center for  
Mathematics of Data | MoD

Hosted by our FAU MoD, the **#MLPDES25 workshop** is an international event that brings together researchers from Europe and the United States to explore the deepening connection between Machine Learning (ML) and Partial Differential Equations (PDEs). With participants from diverse backgrounds, this event aims to establish a collaborative platform for experts to network, share insights, and drive progress in these exciting fields.

We will dive into recent theoretical advancements and applications, while also discussing ongoing challenges in areas such as:

- Control and PDE methods for universal approximation and data classification
- Mean field analysis of Neural Networks
- ML applications in traffic flow modeling and autonomous driving
- ML and numerical simulation in bio-mechanics and micro-fluidics



# Machine Learning and PDEs

## #MLPDES25 WORKSHOP

April 28 - 30, 2025

ERLANGEN - BAVARIA, GERMANY



### WHEN

Mon.-Wed. **April 28 - 30, 2025**

09:30H - 17:00H

### WHERE

**Onsite.** FAU, Friedrich-Alexander-Universität Erlangen-Nürnberg  
Senatssaal (Senate Hall) im Kollegienhaus  
Universitätsstraße 15, 91054 Erlangen - Bavaria, Germany

**Online** (live streaming): <https://www.fau.tv/fau-mod-livestream-2025>

### REGISTRATION

Free but mandatory.

Registration form: [www.dcn.nat.fau.eu/mlpdes25-registration](http://www.dcn.nat.fau.eu/mlpdes25-registration)



[www.mod.fau.eu/mlpdes25](http://www.mod.fau.eu/mlpdes25)

### SCIENTIFIC COMMITTEE

- **Giuseppe Maria Coclite.** Politecnico di Bari
- **Enrique Zuazua.** FAU, Friedrich-Alexander-Universität Erlangen-Nürnberg

### ORGANIZING COMMITTEE

- **Darlis Bracho Tudares.** FAU, Friedrich-Alexander-Universität Erlangen-Nürnberg
- **Nicola De Nitti.** Università di Pisa
- **Lorenzo Liverani.** FAU, Friedrich-Alexander-Universität Erlangen-Nürnberg

### AUDIENCE

This international workshop is open to: Public, Students, Postdocs, Professors, Faculty, Alumni and the scientific community all around the world.

