# FAU

## FAU MoD Lecture Series



# Hybrid Modeling and System Identification: Past and Future Directions

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#FAUMoDLecture

## WHEN
Monday **February 16, 2026**
12:30H (Berlin time)

## WHERE
On-site / Online

Friedrich-Alexander-Universität
Erlangen-Nürnberg (FAU).
Room **H13 Johann-Radon-Hörsaal**
Felix-Klein building
Cauerstraße 11, 91058
Erlangen. Bavaria, Germany

Live-streaming:
**https://www.fau.tv/clip/id/59621**

This talk surveys our recent work in hybrid system identification, where physical structure is combined with black-box components to improve predictive performance. We showcase experimental case studies spanning flexible-joint manipulators, drill strings, and rotating elements subject to nonlinear friction. Across these distinct setups, we show that the most effective hybrid architecture varies substantially, underscoring the need for systematic experimentation and problem-specific model evaluation. We conclude by introducing a new dataset for hybrid identification that fuses vision with proprioceptive sensing, presenting preliminary results and discussing its implications for future work in multimodal model learning.