CSE meets AIMS

Location: IAM Seminarraum, TU Braunschweig

Day and Time: February 20, 2026. 09.00 – 15.00h

This workshop brings together researchers and students from the Computational Sciences in Engineering (CSE) and Artificial Intelligence for Molecular Sciences (AIMS) programs to explore common interests and connect across the two fields. We want to identify overlapping research topics, exchange ideas on new developments, and get to know each other better. The workshop is open to all members of the university, and a few invited speakers will give short pitches on current topics of interest.

The main topics are:

- AI-accelerated materials design (e.g., predicting properties of advanced engineering materials)
- Multiscale modeling for molecular-to-macro system simulations
- Data-driven optimization of chemical and physical processes
- Surrogate modeling, digital twins and scientific machine learning for complex engineering or molecular systems
- Uncertainty quantification in physics- and AI-based simulations
- High-performance computing for large-scale molecular and engineering models

But contributions from all areas of CSE and AIMS are welcome. Participants are encouraged to give a talk, please register via E-Mail (u.roemer@tu-braunschweig.de). We are planning a student poster session and welcome recommendations for contributions. Details on the planning will follow.