

DATA

Organizers

About this

Workshop

Abstract

Submission &

Registration

Association of **Applied** Mathematics and Mechanics (GAMM) in the field of databased modeling, simulation and analysis in the context of microstructured materials.

Data oriented methods are a very active area of research engineering and applied in mathematics. There nowadays are indispensable tools and their development is crucial to the advancement of both academia and industry. In particular, the progress in materials engineering, combined with the advances in data acquisition, processing and mining as well as artificial intelligence, led to new paradigms in materials modelling and their numerical simulation. Developing algorithms and data processing techniques for developing new material models or processing complex and high-dimensional data sets constitute major topics within the GAMM AG Data. Innovative approaches of machine learning as well as concerning microstructure reconstructions or feature identification are of equal importance.

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9th GAMM **AG Data Workshop** Stuttgart | March 20/21

DAY 1

13-18 h 19- ? h	Scientific talks Workshop dinner	DAY 2
9-12 h 12-13 h	Scientific talks & closing Farewell snacks	

The workshop will take place at the University of Stuttgart on the Vaihingen Campus. It is easily reached by S-Bahn from downtown and the airport.

TOPICS

VENUE

- Data-supported modeling of the constitutive behavior of materials
- Data-driven simulation techniques
- Machine learning tools for materials engineering
- · High-performance data-processing
- Microstructure generation, simulation and analysis, e.g. via machine learning or AI tools

OBJECTIVES

- Discuss the state of the art and recent trends in data-driven approaches
- · In-depth discussions and exchange

ABSTRACTS

Template:

mib.uni-stuttgart.de/ dae/ag-data

max. 250 words, PDF & TeX

Please submit to fritzen@simtech.unistuttgart.de providing:

• Title, name, first name, institution

REGISTRATION & WORKSHOP FEE

Please reigster by email until Feb 24 to fritzen@simtech.uni-stuttgart.de. Please provide:

- Title, name, first name
- Institution, postal address, phone number

The workshop fee of EUR 150 covers wokshop participation, printed program / book of abstracts, coffee breaks, workshop dinner, welcome and farewell lunch. Payment information will be sent upon registration.

DATES

Abstract submission Abstract acceptance Registration

Feb 19, 2023 Feb 22, 2023

Feb 24, 2023