



UNIVERSITÄT HOHENHEIM

Computational Science Hub

The Computational Science Hub (CSH)

Joint venture by scientists across all faculties which aims to strengthen transdisciplinary research and teaching at the University of Hohenheim, particularly in the following fields:

- Development of mathematical and statistical Methods for data analysis
- Processing and analysis of large data sets
- Modelling and simulation of complex s
- bioinformatics

Contact

Prof. Dr. Robert Jung (Spokesman)

E: csch@uni-hohenheim.de

T: 0711 – 459 24710

csch.uni-hohenheim.de



The CSH is a platform where scientists from all three faculties (Agricultural Sciences, Natural Sciences, Business, Economics and Social Sciences), whose research involves **processing and analysis of large data sets, modelling and simulation of complex systems, development of mathematical and statistical methods for data analysis or bioinformatics**, can exchange their knowledge and expertise in the context of research and teaching. The aim of this initiative is to strengthen cross-faculty connections and, particularly, to combine **domain knowledge** from various disciplines with profound **methodological expertise** from “computational science” in order to promote innovative and transdisciplinary research and teaching at the University of Hohenheim

In this respect, the CSH actively contributes to the university-wide research topic “digital transformation”.

Specifically, the CSH combines **domain knowledge from the fields**

- Financial and commodity markets
- Innovation and sustainability
- Crop science and biology,
- digital agricultural science and diffusion processes

with **methodological expertise** in:

- Agent-Based Modeling (ABM),
- Digital Twinning,
- microeconometrics (particularly quantitative evaluation methods for evidence based decision making)
- network analysis
- quantitative text analysis and text mining
- statistical Learning,
- design of experiments, and
- time series econometrics