





IS OUR WORLD AGENT-BASED AND CAN WE MODEL IT?

par
Uta Berger
Univ. Techn. Dresde, All.

- Agent-based (or individual-based) models are suitable to describe social, economic or ecological systems whose dynamics are shaped by the interactions, variability and adaptation of their entities namely organisms, humans or organizations.
- Based on example models developed in our working group, which range from the description of microbial communities over animal population to plant communities, I demonstrate the basic principles, and functioning of agent-based modelling. Selected applications will show the potential and suitability of the approach to better understand complex ecological systems, to forecast their response to environmental changes and to guide the design and optimization of management measures.
- By discussing the pro and cons of agent-based models, I will outline the current status of this approach and outlook to the future of agent-based sciences.

