FOMT 2.3A: Modelling

Contents:

An overview of individual-based and agent-based modelling (IBM/ABM), model development, implementation, parameterization, and sensitivity analysis. Handling of uncertainties in data, the design of simulation experiments and statistical analyses of the results. Integration into models of spatial data by Geographical Information Systems (GIS). Geo-data processing and –integration, visualization as well as elementary analyses.

Qualification Goals:

The students are able to design and program models, as well as to conduct and analyse simulation experiments, using IBM/ABM. They are able to generate, handle and analyse geo-data, and to use them as input into IBM/ABM.