

Winter School

Spatial Simulation Modelling

Salzburg, 13. - 22. Feb. 2019

Organising lecturers

Ass. Prof. Gudrun Wallentin (Geoinformatics and Ecology, University of Salzburg)
Dr. Christian Neuwirth (Geoinformatics, University of Salzburg)

Target group

This course addresses students and early career researchers, who are interested in spatially explicit simulation of natural and/or social systems by the means of agent-based modelling. Individuals from domains such as Geoinformatics, Geography, Ecology, Social Science, Spatial Planning, or Forestry are welcome. Interest in computational methods is a prerequisite, but no prior knowledge in modelling or programming is needed.
Participants: 8 - 20

Description

Simulation models help to gain a better understanding of complex, living systems. In this winter school, you will get hands-on experience with the concepts and methods of spatially-explicit agent-based modelling. Models will target and integrate a range of domains and application areas. Supported by experienced modellers, you will develop your modelling skills step-by-step. After the winter school, you will be able to conceptualise, implement and validate your own models to conduct research on complex systems and to solve applied management problems.

In the winter school, you will model real-world questions in and around the City of Salzburg in interdisciplinary groups. During a field trip you will get to know the study areas and have the possibility to collect field data for model input and validation. Further, you are encouraged to work on your own research problems.

Software

GAMA, an open source platform for spatially-explicit agent-based modelling, will be used for lecturing and tutoring. Support for NetLogo can be provided.

Costs

450€ (excluding travel and accommodation);
For UNIGIS Students and ClubUNIGIS members: 300.- € (excl. travel and accommodation)

Credits

3 ECTS

Information, contact and application

<http://spatial-simulation.zgis.at/winter-school>

Available places will be allocated in the order of registration dates (receipt of payment).