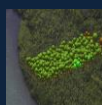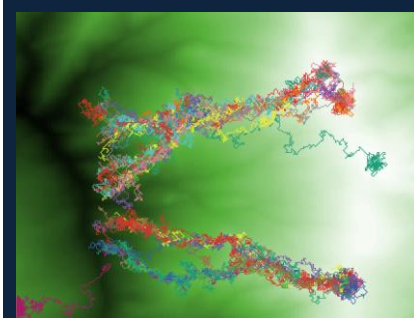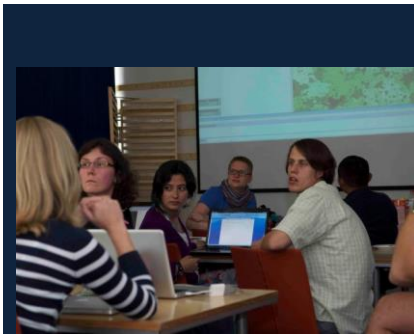# VIIIth SUMMER SCHOOL IN INDIVIDUAL - & AGENT-BASED MODELLING 2014
AT THE DRESDEN UNIVERSITY OF TECHNOLOGY (TU Dresden), GERMANY

Institute of Forest Growth And Computer Sciences, TU Dresden Germany

Contents

The course will provide an overview of the state-of-the art in individual- and agent-based modelling, model development, implementation, parameterization, and sensitivity analysis. Further topics are handling uncertainty in data, designing simulation experiments, and statistical analysis of simulation results.

The class is intended primarily for PhD students in relevant subject areas (e.g., ecology, biology, forest ecology, environmental sciences, physics, systems analysis, social sciences etc.) strongly interested in using IBMs/ABMs in their study, and those looking for effective strategies for analyzing models and conducting simulation experiments.

The course will use NetLogo modelling software in combination with the R platform for statistical analyses. Basic knowledge of both Netlogo and R is required. Material introducing NetLogo and R will be provided before the course.

The lecturers are Uta Berger (TUD, Germany), Steve Railsback (USA), and Cyril Piou (CIRAD, France). All of them are ecologists, so most of their example models will be from ecology. Scholars from other disciplines are also welcome.

The course will consist of lectures, exercises, and extensive modelling projects to be presented in groups at the end of the course.

Credit Points: 4 ECTS

Schedule 9 days + tutorial-driven self-study in advance

Date   10. - 18.July 2014

Location   Natur Hotel Lindenhof, Holzhau (Saxony, Germany)

Number of Participants   max 25

Course fee 800 Euro including tuition, accommodation, breakfast diner, as well as the transport from Dresden main station to Holzhau (arrival day) and back (departure day).

Application via http://www.forst.tu-dresden.de/summerschool/

Application deadline: 15. March 2014

Contact   summerschool@forst.tu-dresden.de

Miscellaneous: The course will take place in Holzhau – located in the heart of the Ore Mountains (http://en.wikipedia.org/wiki/Ore_Mountains). There will be optional hiking tours through a beautiful and fascinating landscape on Sunday and Wednesday afternoons. We also recommend a visit to Dresden (http://en.wikipedia.org/wiki/Dresden) before or after the course. We will provide support for preparing your travel.