# LEHRSTUHL FÜR STEUERUNG INNOVATIVER UND KOMPLEXER TECHNISCHER SYSTEME PROF. DR. LASSE GERRITS



**Education Program SS 2017** 

Seminar: Computer-aided Social Inquiry: System Dynamics Modeling

Room: RZ00.06

**Time:** Tuesday, 12-14 h **Start:** 25<sup>th</sup> of April 2017

## **Short Description:**

Actors operating in complex governance systems deal with a multitude of interlocking variables. That generates considerable uncertainty regarding the possible outcomes of certain decisions. It is therefore pivotal to obtain a better understanding of the systemic properties of certain political and policy issues. One way of achieving this is by combining empirical research with software to model such issues.

In this course, we will focus on Soft Systems Methodology and will learn how to use this research method as a means of knowledge creation, organizational learning and strategic positioning within complex systems. It offers a mixture of research methods, modeling and simulation, and interpretative analysis. The students will work on a small research project (individually). The research project encompasses: (a) identification and articulation of a governance issue, (b) data collection, (c) modeling, and (d) simulations of certain scenarios. Along the research process, we will discuss persistent issues such as causality in complex systems, subjectivism vs. objectivism, factors that influence organizational learning and issues related to strategy. Note that modeling is an iterative process so we will move back and forth in the research cycle.

#### Notes:

The seminar will be taught in English.
Test and grading: paper
Minimum - maximum number of participants: 3-15

#### **Registration:**

Via FlexNow! From April 1st until May 13th, 2017

### **Speaking hours:**

Thursday, 11-12 h

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