

Second GKSS School on Environmental Research

Almost every scientific discipline is operating with "models", but a closer inspection discloses that a large variety of different ideas are labelled as "models". For some scientists models are per se complex numerical models implemented on computers, but other disciplines think of mechanical analogs. Still others consider "models" as restricted concepts, within which basic dynamical (natural science as well as social science) aspects can be understood or described. Quasi-realistic models are meant as "substitute reality" which provide no immediate understanding but allow for (numerical) experiments in situations when real experiments can not be done (such as on the effect of dredging a river), others aim at the identification of the base processes and their interaction (conceptual models). Still others are used to interpret (inter-, extrapolate) sparse data in space and time for aggregating a complete analysis of the state of a system and its forecast. Some models are not built in a systematic scientific manner, but emerge in the social processes, and become powerful agents in the political arena.

The Second GKSS School on

Models in Environmental Research

will be held in the **Zündholzfabrik in Lauenburg**, Germany, (about 50 km southeast of Hamburg, on the northern bank of the river Elbe), **from 23 to 28.9.1998**. It brings together scientists from a variety of disciplines, ranging from natural sciences to social sciences to discuss the various "models" concepts and their specifics and objectives.

Tentative List of Contributions and Contributors

History and the purposes of models	Nico Stehr (University of British Columbia)
Role of Models	Hans von Storch (GKSS)
Conceptual Models	Peter Mueller (SOEST, Hawaii)
Simulation Models:	
- dynamics	Antonio Navarra (IMGA, Bologna)
- statistics	Francis Zwiers (CCCMA, Victoria, Canada)
- geostatistics: "Models in spatial statistics"	Hans Wackernagel (Ecole des Mines, Paris)
- engineering:	Richard Wagner (GKSS)
- chemistry:	Bernd Neidhart (GKSS)
Analog/Mechanical Models	NN
Mathematical Models	Jürgen Sündermann (Hamburg Univ.)
Models as Interpretative Tools	Nadia Pinardi (IMGA, Bologna)
Models as a Tool for Reconstruction	Tom Crowley (College Station Texas)
Process-oriented Modelling	NN
Forecast Models	NN
Society Models	Wim Salomons (GKSS)
Policy Models	NN
Conclusion	Reimar Luest