

Curriculum Vitae

Klaus Eisenack

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Working Experience

- since 2001 Scientist at the Potsdam Institute for Climate Impact Research (PIK). Research interests: management of natural resources, adaptation and mitigation of climate change, non-standard modelling methods, modelling of institutions and games on global change.
- 1999-2001 Student assistant at the Institute for Chemistry and Biology of the Marine Environment (ICBM), Carl von Ossietzky University Oldenburg, Germany.
- 1998-1999 Student assistant at the Department for Economics and Statistics, University Oldenburg.
- 1996-1998 Mathematical tutorials at the University Oldenburg.

Education

- 2006 PhD in Applied Mathematics, Free University Berlin. Thesis on "Model Ensembles for Natural Resource Management".
- 2001 Diploma in Mathematics, Carl von Ossietzky University Oldenburg, Germany. Diploma thesis on "Modelling under Uncertainty: Qualitative Differential Equations in Bioeconomics".
- 1999 Examination in philosophy and economics, Carl von Ossietzky University Oldenburg.
- 1995 Course in statistics, philosophy and environmental science, University of Stirling, Scotland.

Visiting Positions

- 2003/2004 (two months): Guest researcher at CREA, Ecole Polytechnique, Paris: Analyzing Influence Diagrams by Linking Qualitative Dynamics and Viability Theory.

Publications

Articles

- K. Eisenack, J. Kropp, H. Welsch (2006): A Qualitative Dynamical Modelling Approach to Capital Accumulation in Unregulated Fisheries. *Journal of Economic Dynamics and Control*, DOI: 10.1016/j.jedc.2005.08.004.
- K. Eisenack, J. Scheffran and J. Kropp (2006): Viability Analysis of Management Frameworks for Fisheries. *Environmental Modelling and Assessment*, 11, 69-79.
- J. Kropp, K. Eisenack, J. Scheffran (2004): Sustainable Marine Resource Management: Lessons from Viability Analysis, in: A. E. Rizzoli, A. J. Jakeman (eds.): *Integrated Assessment and Decision Support, Proceedings of the First Biennial Meeting of the International Environmental Modelling and Software Society*, 1, 104-109.

K. Eisenack (2003): Qualitative Viability Analysis of a Bio-Socio-Economic System, in P. Salles, B. Bredeweg (eds.): Working Papers of the 17th Workshop on Qualitative Reasoning, 63-70. Brasilia.

K. Eisenack, G. Petschel-Held (2002): Graph Theoretical Analysis of Qualitative Models in Sustainability Science, in N. Agell, J. A. Ortega (eds.): Working Papers of 16th International Workshop on Qualitative Reasoning, 53-60. Edicion Digit@altres, Sevilla.

H. Welsch, K. Eisenack (2002): Energy Costs, Endogenous Innovation and Long-Run Growth, Jahrbücher für Nationalökonomie und Statistik, 222(4), 490-499.

K. Eisenack, J. Kropp (2001): Assessment of Management Options in Marine Fisheries by Qualitative Modelling Techniques, Marine Pollution Bulletin, 43(7-12), 215-224.

Contributions to Books

J. Kropp, K. Eisenack, J. Scheffran (2006): Marine Overexploitation: A Syndrome of Global Change, in S. Sonak et al. (eds.): Multiple Dimensions of Global Change, 257-284. TERI Press, New Delhi.

J. Kropp, K. Zickfeld, K. Eisenack (2002): Assessment and Management of Critical Events: The Breakdown of Marine Fisheries and the North Atlantic Thermohaline Circulation, in A. Bunde, J. Kropp, H. J. Schellnhuber (eds.): The Science of Disasters, Springer, 192-216.

K. Eisenack, O. Moldenhauer, F. Reusswig (2002): Möglichkeiten und Grenzen qualitativer und semiquantitativer Modellierung von Mensch-Gesellschafts-Interaktionen, in I. Balzer, M. Wächter (eds.): Sozial-Ökologische Forschung, ökom Verlag, München, 377-389.

Presentations

Archetypes of Adaption, ASTRA Workshop on Policies and Adaptation Strategies to Climate Change in the Baltic Sea Region, November 2006, Hamburg.

Generating Policy Relevant Knowledge in Uncertain Situation: How and Why?, 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, October 2005, Bonn, Germany.

Sustainable Management of Natural Resources (invited), Greifswald International Students Festival, June 2005, Greifswald, Germany.

Sustainable Marine Resource Management: Lessons from Viability Analysis, First Biennial Meeting of the International Environmental Modelling and Software Society, June 2004, Osnabrück, Germany.

Euromix - Measurement and Simulation of Euro Diffusion (invited), International Workshop on Euro Diffusion, April 2003, Cercedilla, Spain.

Conflict Resolution, Management and Decision-Making for Sustainable Fisheries: A Qualitative Multi-Agent Approach to Viable Control, Jahrestagung of the German Physical Society (DPG), March 2003, Dresden, Germany.

Graph Theoretical Analysis of Qualitative Models in Sustainability Science, 16th International Workshop on Qualitative Reasoning, June 2002, Sitges, Spain.

Qualitative Modelling and Simulation of a Coupled Bio-Economic System (poster), 15th International Workshop on Qualitative Reasoning, May 2001, San Antonio, Texas.

Teaching

Tutorial: Mathematics for Economists, University of Oldenburg, 1998.

Seminar: Formal Methods to Describe the Interaction between Society and Nature, Potsdam University, 2006.

Simulation&Gaming Facilitation and Design

Keep Cool and Climate Conference, Climate Day with 120 Pupils at the John-Lennon Gymnasium, Berlin, March 2006.

QUAM – game on urban sprawl, Summer School of the Integrated Assessment Society (TIAS) on Stakeholder Participation and Model-Building in Sustainable Resource Management, Osnabrück, Germany, July 2005.

K. Eisenack, G. Petschel-Held (2004): Keep Cool – Gambling with the Climate. Board game on climate politics. Spieltrieb, Wiesbaden (see <http://www.spiel-keep-cool.de>).

Keep Cool – Gambling with the Climate, Berliner Lange Nacht der Wissenschaften (Long Science Night), June 2005 and June 2004.

The Fishery Game, Potsdamer Lange Nacht der Wissenschaften (Long Science Night), September 2003, and Brandenburg Girls & Boys Day, funded by the German Federal Ministry for Education and Research, May 2003.

Further Training

Summer School of the Integrated Assessment Society (TIAS) on Stakeholder Participation and Model-Building in Sustainable Resource Management, Osnabrück, Germany, July 2005.

Facilitation and Presentation Techniques, University Potsdam, Germany, May 2005.

Summer School of the MONET Network of Excellence on Qualitative Reasoning, Bertinoro, Italy, May 2000.

Interests

Travelling, walking, cooking, roleplaying.