

1st Hamburg Workshop on Agent-based Modeling of Environmental Challenges and Climate Policy

Program (Version: 9 March 2017, with registered participants in bold letters)

Friday, 10 March 2017

- 8:30 – 9:00 Registration (Room 1012, First Floor)
- 9:00 – 9:15 Opening of Workshop and Welcome Addresses (Room 008, Ground Floor)
- 9:15 – 10:15 KEYNOTE ADDRESS (Room 008, Ground Floor)
Agents, Coalitions and Social Networks in Environmental Conflict and Cooperation
Jürgen Scheffran
- 10:15 – 10:45 Coffee Break (Room 1012, First Floor)
- 10:45 – 12:00 KEYNOTE ADDRESS (Room 008, Ground Floor)
CO₂ Reduction Strategies in a Simplified Multipolar Artificial World. The Role of “Alternative Facts” in CO₂ Policy Making
Klaus G. Troitzsch
- 12:00 – 13:30 Lunch (Room 1012, First Floor)
- 13:30 – 14:30 PARALLEL SESSIONS A

A1: Environmental Challenges for Urban Areas (Room 006, Ground Floor)

Session Chair: **Sascha Hokamp**

Modeling the Governance of Transitions: A Simulation Experiment on Urban Transportation

Fabian Adelt, Sebastian Hoffmann, and Johannes Weyer

Human Exposure to Environmental Stresses in Urban Areas: An Agent-based Simulation for Hamburg
Ingenuin Gasser, Peter Hoffmann, Sascha Hokamp, Sven Rühle, Jürgen Scheffran, and Liang Yang

Policy Recommendations on Brownfield Redevelopment: An Agent-based Simulation for France
Benjamin Hepburn, Marjorie Tendero, Cécile Bazart, Tatiana Filatova, and Sascha Hokamp

A2: Climate Policy I: Coalitions, Conflicts and Cooperation (Room 008, Ground Floor)

Session Chair: **Tristan de Wildt**

A Multilevel Selection Model of the Co-evolution of Cooperation and Inter-group Conflict, Climate Change, and Pastoralist Conflict in East Africa

Nicolas A. Seltzer

A Stock-flow Consistent Monetary-physical Flow-fund Model

Jonathan Barth and Oliver Richters

Modeling Societal Concerns from Conflicting Ethical Values

Tristan de Wildt

- 14:30 – 15:00 Coffee Break (Room 1012, First Floor)

15:00 – 16:15 KEYNOTE ADDRESS (Room 008, Ground Floor)
Faraway, So Close: An Agent-based Model for Climate, Energy and Macroeconomic Policy
Andrea Roventini

16:15 – 16:40 Short Break (Foyer, Ground Floor)

16:40 – 18:00 PARALLEL SESSIONS B

B1: Environmental Challenges: Water, Energy, Food and Migration (Room 006, Ground Floor)

Session Chair: **Wander Jager**

Water Use Trade-offs: How Integrated Modeling Can Help

Lukas Drees

A Dynamic Sustainability Analysis of Energy Landscapes in Egypt: An Agent-based Model Combined with Multi-criteria Decision Analysis

Mostafa Shaaban and Jürgen Scheffran

Climate Effects on Wheat Markets: An Agent-based Approach

Edmondo Di Giuseppe, Gianfranco Giuliani and Massimiliano Pasqui

United We Stand? Simulating Acculturation Processes in a Migration Context Using “MigrAgent”

Rocco Paolillo and Wander Jager

B2: Climate Assessment Modeling (Room 008, Ground Floor)

Session Chair: **Sascha Hokamp**

The Effect of Green Investments in an Agent-based Climate-economic Model

Sylvie Geisendorf and Christian Klippert

A Scalable Hybrid SD/ AB /SD Modeling Approach to Climate Assessment Modeling

Peer-Olaf Siebers, Zhin Lim En, and Graziela Figueredo

An Agent-based Modeling Approach to Integrated Assessment of Climate Change

Marcin Czupryna, Sascha Hokamp, and Jürgen Scheffran

19:00 – 22:00 Informal Conference Dinner

Saturday, 11 March 2017

8:45 – 9:00 Registration (Room 1012, First Floor)

9:00 – 10:15 KEYNOTE ADDRESS (Room 008, Ground Floor)
Agent-based Approaches for Analysis and Modeling of Land-use and Energy Systems
Kristian Lindgren

10:15 – 10:30 Short Break (Foyer, Ground Floor)

10:30 – 11:30 PARALLEL SESSIONS C

C1: Climate Policy II: Coalitions, Conflicts and Cooperation (Room 006, Ground Floor)

Session Chair: **Mohammad Mohammadi Khabbazan**

Adoption and Diffusion of Distributed Energy Systems in Consumers' Coalitions: An Agent-based Simulation

Francesco Pasimeni

The SHE-Model: An Innovative Methodology to Address Environmental Challenges and Climate Policy

Jasmin S. A. Link

Adaptive Coalition Formation and Climate Change: An Agent-based and Integrated Assessment Approach

Andrés M. Cuervo, Hermann Held, Sascha Hokamp, Jasmin S. A. Link, P. Michael Link, Mohammad Mohammadi Khabbazan, Jürgen Scheffran, and Kesheng Shu

C2: Transition of Energy Systems (Room 008, Ground Floor)

Session Chair: **Wander Jager**

Households Behavior Change and Energy Use in Transition to a Low-carbon Society

Leila Niamir and Tatiana Filatova

Agent-based versus Optimization Models of the Electricity System: Exploring the Dynamics of a Large-Scale Expansion of Wind Power

Emma Jonson, Liv Lundberg, Kristian Lindgren and Christian Azar

The Energy Transition Game (ETG)

Wander Jager and Geeske Scholz

11:30 – 12:00 Coffee Break (Room 1012, First Floor)

12:00 – 13:00 PARALLEL SESSIONS D

D1: Renewable Energy (Room 006, Ground Floor)

Session Chair: **Jürgen Scheffran**

AMIRIS: An Agent-based Simulation Model for the Analysis of Market Integration of Renewable Energies under Various Energy Policy Frameworks

Ulrich Frey, Kristina Nienhaus, Marc Deissenroth, Martin Klein, and Matthias Reeg

Modeling of Renewable Energy Production in Schleswig -Holstein, Germany

P. Michael Link, Kesheng Shu and Jürgen Scheffran

Agent-based Modeling of Pathways of Energy Landscapes in Northern Germany

Jinxi Yang, Sascha Hokamp and Jürgen Scheffran

D2: Environmental Challenges: Innovation (Room 008, Ground Floor)

Session Chair: **Kerstin Hötte**

An Agent-based Model Exploring the Diffusion of Electric Vehicles

Ayla Kangur, Wander Jager, Rineke Verbrugge, and Marija Bockarjova

Changes in Consumption Patterns and Eco-Innovation Diffusion: An Agent-based Modeling Approach

Florian Lewalder

Agent-based Modeling of Technological Transformation: A Macroeconomic Evolutionary Approach to the Spread of Sustainable Technology and the Scope of Innovation Policy

Kerstin Hötte

13:00 – 13:30 Concluding Plenary and Wrap-up (Room 008, Ground Floor)