

## REGISTRATION

*All sessions are open but places are strictly limited so please register early by providing the following information to Brigitte Thurner by email, phone, fax or post (address on front cover).*

email: [brigitte.thurner@unibz.it](mailto:brigitte.thurner@unibz.it)  
Tel: (+39) 0471 013003  
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TITLE \_\_\_\_\_

NAME \_\_\_\_\_

AFFILIATION \_\_\_\_\_

Email address \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Tel No \_\_\_\_\_

I would like to attend the lecture on the 30<sup>th</sup> March 2009 at 18.00

Yes  No

I would like to attend the research seminar on the 31<sup>st</sup> March 2009 at 8.30

Yes  No



FREIE UNIVERSITÄT BOZEN  
LIBERA UNIVERSITÀ DI BOLZANO  
FREE UNIVERSITY OF BOZEN · BOLZANO

## School of Economics and Management

### Research Seminar

### *Innovation Systems, Complex Systems and Sustainable Development*

#### ACADEMIC ORGANISER

Professor Christine Oughton  
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Mob: (+39) 345 2929 503

#### ADMINISTRATIVE ORGANISER

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**30-31 March 2009**

**Free University of Bozen-Bolzano  
Via Sernesi/Sernesistrasse, 1  
39100 Bozen-Bolzano  
Italy**

**INVITATION**

Climate change poses fundamental challenges to researchers and policy makers to design and implement policies for sustainable development and to catalyse transitions to a low carbon economy. There is now a growing awareness that traditional policy instruments such as taxes or carbon trading schemes are unlikely, by themselves, to deliver the necessary reductions in environmental pollution within the timescales available. The development and diffusion of new technologies and radical innovations are increasingly being seen as an essential and integral part of environmental policy. The aim of this research seminar is to explore how recent developments in complex systems theory, management theory and the systems of innovation literature can be used to inform the design of policies to reduce carbon emissions and promote sustainable development.

Complex systems theory explores how the actions and reactions of agents combine to create system wide effects, so that systems evolve and change over time. A particular feature of such systems is the possibility of lock-in to inefficient technologies, such as, lock-in to carbon-intensive technology when more efficient low-carbon technologies are available. Management theory analyses how firms formulate and implement strategies for innovation, while the systems of innovation literature examines how private and public sector institutions interact to initiate, develop and diffuse new technologies. This seminar aims to draw together these approaches to address key questions regarding the development, adoption and diffusion of technologies for sustainable production. In doing so it hopes to contribute to the design of policy measures to promote sustainable development and transitions to a low carbon economy.

## PROGRAMME

### MONDAY 30 MARCH 2009

Room C4.3 - 4<sup>th</sup> Floor, C-Building

18.00 Welcome

18.05 Lecture and Discussion

*Agent-Based Modelling for Transitions in Transport*

Dr Jonathan Köhler  
Fraunhofer Institute for Innovation and Systems  
Research, Karlsruhe

**Discussant**

Dr Carlo Sessa  
Institute of Studies for the Integration of Systems  
Rome

19.30 Networking and Refreshments

20.00 Dinner for invited participants  
at Hotel Città

### TUESDAY 31 MARCH 2009

Room C4.3 - 4<sup>th</sup> Floor, C-Building

8.30 Tea & Coffee

8.30 Welcome and Introduction

9.00-10.30 Paths and Systems Transitions

*Paths to Sustainable Energy Systems*

Dr Sigrid Stagl  
Science Policy Research Unit, University of Sussex

*System Transition: Concepts and Framework for  
Analysing Energy System Research and Governance*

Professor Javier Carillo-Hermosilla  
The Centre for Eco-Intelligent Management  
IE Business School, Madrid

**Discussant**

Dr Tim Foxon  
School of Earth and Environment  
University of Leeds

10.30-10.45 Coffee Break

10.45- 12.15 Systems and Sustainable Development

*The Hybrid Economy's Biophysical Side*

Anke Schaffartzik  
Institute for Social Ecology, Vienna, Klagenfurt  
University

**Discussant**

Dr Jonathan Köhler  
Fraunhofer Institute for Innovation and Systems  
Research, Karlsruhe

*Innovation Systems and Environmental Management*

Dr Dominic Hogg  
Eunomia Research and Consulting, UK

**Discussant**

Professor Jonathan Michie  
University of Oxford

12.15 Roundtable Discussion

12.30-13.30 Lunch for invited participants  
at Hotel Città

13.30 Close of Meeting