

## **ELGAR HANDBOOK ON THE SYSTEM DYNAMICS OF TECHNOLOGICAL CHANGE**

DEPARTMENT OF ECONOMICS "S. COGNETTI DE MARTIIS", UNIVERSITY OF TURIN  
BRICK, COLLEGIO CARLO ALBERTO, MONCALIERI (TURIN)

4TH – 5TH DECEMBER 2009

### **December 4<sup>th</sup> – Afternoon**

12,45 Gathering and leaving from the *Jolly Hotel, Ligure Piazza Carlo Felice 85*, to *Collegio Carlo Alberto*

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| <b>SESSION 1 COMPLEXITY AND ECONOMICS</b> |
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| 13,10 – 15,20 |
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**WELCOME: PIETRO GARIBALDI E CRISTIANO ANTONELLI**

**CHAIR AND INTRODUCTION: PETER ALLEN**

13,15 **COMPLEXITY AND INNOVATION DYNAMICS**

*David Lane*

13,35 **COMPLEXITY AND THE THEORY OF THE FIRM**

*Harry Bloch & Stan Metcalfe*

13,55 **EVOLUTIONARY GROWTH MODELS FOR AN EVOLUTIONARY ECONOMIC GEOGRAPHY**

*Ron Boschma and Koen Frenken*

14,15 **MESODYNAMICS: ECONOMIC CHANGE IN AN EVOLUTIONARY KEY**

*Kurt Dopfer*

14,35 **DISCUSSION**

15,15 Coffee Break

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| <b>SESSION 2 COMPLEXITY AND KNOWLEDGE I</b> |
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| 15,30 – 17,10 |
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**CHAIR AND INTRODUCTION: PAULA STEPHAN**

15,30 **THE BIOMEDICAL WORKFORCE IN THE U.S. AN EXAMPLE OF POSITIVE FEEDBACKS**

*Paula Stephan*



- 15,50      **INTERACTIONS BETWEEN FIRMS AND UNIVERSITIES: THE UNRESOLVED PUZZLE**  
*Aldo Geuna*
- 16,10      **THE COMPLEX DYNAMICS OF SCIENTIFIC ACTIVITIES: PATH DEPENDENCY IN RESEARCH STRATEGIES AND HEURISTICS**  
*Chiara Franzoni, Giuseppe Scellato and Mario Calderini*
- 16, 30      **A FUNCTIONAL THEORY OF TECHNOLOGY AND TECHNOLOGICAL CHANGE**  
*Andrea Bonaccorsi*
- 16,50      **DISCUSSION**
- 17,20      Coffee break

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| <b>SESSION 3</b> | <b>COMPLEXITY AND KNOWLEDGE II</b> | 17,35 – 19,00 |
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**CHAIR AND INTRODUCTION: PIER PAOLO SAVIOTTI**

- 17,35      **KNOWLEDGE, COMPLEXITY AND NETWORKS**  
*Pier Paolo Saviotti*
- 17,55      **THE DYNAMICS OF TECHNOLOGICAL KNOWLEDGE**  
*Jackie Krafft and Francesco Quatraro*
- 18,15      **CAUSES, CONSEQUENCES AND DYNAMICS OF 'COMPLEX' DISTRIBUTIONS OF TECHNOLOGICAL ACTIVITIES: THE CASE OF PROLIFIC INVENTORS**  
*William Latham and Christian Le Bas*
- 18,35      **DISCUSSION**
- 19,00      Back to the Hotel
- 20,00      Dinner at the Restaurant 'Perbacco', via Mazzini 31.

**December 5th– Morning**

- 8,45      Leaving the Hotel to *Collegio Carlo Alberto*

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| <b>SESSION 4</b> | <b>COMPLEXITY AND STRUCTURAL CHANGE I</b> | 9,30 – 11,00 |
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**CHAIR AND INTRODUCTION: MARTIN FRANSMAN**

- 9,30      **THE SYMBIOTIC THEORY OF INNOVATION KNOWLEDGE CREATION AND THE EVOLUTION OF THE CAPITALIST SYSTEM**  
*Martin Fransman*
- 9,50      **NETWORK EVOLUTION AND GENERATION**  
Uwe Cantner and *Holger Graf*



- 10,10      **THE COMPLEX INTERACTION BETWEEN GLOBAL PRODUCTION NETWORKS, DIGITAL INFORMATION SYSTEMS AND INTERNATIONAL KNOWLEDGE TRANSFERS**  
*Jan Fagerberg, Dieter Ernst and Jarle Hildrum*
- 10,30      **DISCUSSION**
- 11,00      Coffee break

**SESSION 5      COMPLEXITY AND STRUCTURAL CHANGE II**

11,15 – 12,45

**CHAIR AND INTRODUCTION: GABRIEL YOGUEL**

- 11,15      **THE COMPLEX DYNAMICS OF ECONOMIC DEVELOPMENT**  
*Gabriel Yoquel and Veronica Robert*
- 11,35      **THE PERSISTENCE OF INNOVATION AND PATH DEPENDENCE**  
*Nick von Tunzelmann and Alessandra Colombelli*
- 11,55      **COMPLEXITY AND THE COORDINATION OF TECHNOLOGICAL KNOWLEDGE: THE CASE OF INNOVATION PLATFORMS**  
*Pier Paolo Patrucco and Davide Consoli*
- 12,15      **DISCUSSION**
- 13,00      Lunch

**December 5th – Afternoon**

**SESSION 6      COMPLEXITY AND ECONOMIC POLICY**

14,00 – 15,30

**CHAIR AND INTRODUCTION: PASCAL PETIT**

- 14,20      **CO-EVOLUTION, EMERGENCE AND ECONOMIC DEVELOPMENT: SOME LESSONS FROM THE ISRAELI AND MEXICAN EXPERIENCE**  
*G. Dutrénit And M. Teubal*
- 14,40      **SIMULATION MODELS FOR ECONOMIC POLICY**  
*Pietro Terna*
- 15,00      **DISCUSSION**
- 15,30      *Workshop ends: some conclusions*
- 16,00      Bus back to Torino

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The Room will be equipped with a laptop and a standard video-projector. Presenters, please have your presentation ready on a USB memory card.