



Università  
Ca' Foscari  
Venezia

**Department  
of Applied Mathematics**

### **Artificial Economics 2010**

is organized by the  
**Department of Applied Mathematics**  
(Ca' Foscari University of Venice)

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**<http://www.dma.unive.it/ae2010/>**

Artificial Economics aims to provide a generative approach to understanding problems in economics and social sciences. It is based on the consistent use of agent-based models and computational techniques. It encompasses a rich variety of techniques that generalize numerical analysis, mathematical programming, and micro-simulations. The peer-reviewed contributions presented in this conference address applications of Artificial Economics to markets and trading, auctions, networks, management, industry sectors, macroeconomics and demographics and culture.



# **A Symposium in Agent-Based Computational Methods in Finance and Economics**

**6th edition  
September 9-10 2010**

**Riviera Garibaldi 13/E  
Treviso (Italy)**

## THURSDAY 9 SEPTEMBER

8.00 Participants Registration

8.45 Conference Introduction / Welcome session chaired by Paolo Pellizzari

9.00 Invited Talk  
Frank Westerhoff  
**Agent-based Financial Market Models and the Effectiveness of Regulatory Policies**

10.00 Coffee Break

10.30 **MARKETS AND TRADING**

Chair: Philippe Mathieu

**Agent's Minimal Intelligence Calibration for Realistic Market Dynamics**

Veryzhenko I., Brandouy O. and Mathieu P.

**Trading on Marginal Information**

Hauser F. and Kaempff B.

**Stylized Facts Study Through a Multi-Agent Based Simulation of an Artificial Stock Market**

Kodia Z., Ben Said L. and Ghedira K.

12.00 **AUCTIONS**

Chair: Marta Posada

**A Variable bid Increment Algorithm for Reverse English Auction**

Brigui-Chtioui I. and Pinson S.

**Co-evolutionary Agents in Combinatorial Sealed-bid Auctions for Spectrum Licenses Markets**

Mochon A., Saez Y., Gomez-Barroso J.L. and Isasi P.

**The Effect of Transaction Costs on Artificial Continuous Double Auction Markets**

Posada M. and Hernández C.

13.30 Lunch Break

15.00 **MACROECONOMICS**

Chair: Andrea Teglio

**Wealth Distribution Evolution in an Agent-Based Computational Economy**

Romanov V., Yakovlev D. and Lelchuk A.

**Endogenous Credit Dynamics as Source of Business Cycles in the EURACE Model**

Teglio A., Raberto M. and Cincotti S.

**Reinforcement Learning of Heterogeneous Private Agents in a Macroeconomic Policy Game**

Hemmati M., Nili M. and Sadati N.

16.30 Coffee Break

17.00 **DEMOGRAPHICS AND CULTURE**

Chair: Tim Verwaart

**Towards and Agent-Based Model of the Economic Development Process: The Dynamics of the Fertility Rate**

Giulioni G. and Bucciarelli E.

**An Agent-Supported Simulation of Labour and Financial Markets for Migration Processes**

Ruiz N., Botti V., Giret A., Julian V., Alvarado O., Perez V. and Rodriguez R.

**Sensitivity Analysis of an Agent-Based Model of Culture's Consequences for Trade**

Burgers S.L.G.E., Hofstede G.J., Jonker C.M. and Verwaart T.

20.30 Social dinner

## FRIDAY 10 SEPTEMBER

9.00 **NETWORKS**

Chair: Matteo Marsili

**The Rise and Fall of Trust Networks**

Anand K., Gai P. and Marsili M.

**Simulations on Correlated Behavior and Social Learning**

Blasco A. and Pin P.

**Technology Shocks and Trade in a Network**

Taghawi-Nejad D.

**Wage Discount vs. Premium for the Network Search in the Labour Market**

Horvat G.

11.00 Coffee Break

11.30 **MANAGEMENT**

Chair: Andrea Consiglio

**The (Beneficial) Role of Informational Imperfections in Enhancing Organisational Performance**

Wall F.

**Social Interactions and Innovation: Simulation Based on an Agent-Based Modular Economy**

Chie B.T. and Chen S.H.

**Threshold Rule and Scaling Behavior in a Multi-Agent Supply Chain**

Lacagnina V. and Provenzano D.

13.00 Lunch Break

14.30 **INDUSTRY SECTORS**

Chair: Florian Hauser

**Information and Search on the Housing Market: An Agent-Based Model**

Mc Breen J., Goffette-Nagot F. and Jensen P.

**Adaptation of Investments in a Pharmaceutical Industry**

Schüette T.

**An Agent-Based Information Management Model of the chinese Pig Sector**

Osinga S.A., Kramer M.R., Hofstede G.J., Roozmand O. and Beulens A.J.M.

16.00 Coffee Break

16.30 Invited Talk

Thomas Bäeck

**Evolutionary Algorithms and Applications in Engineering and Finance**

17.30 Conference Conclusions