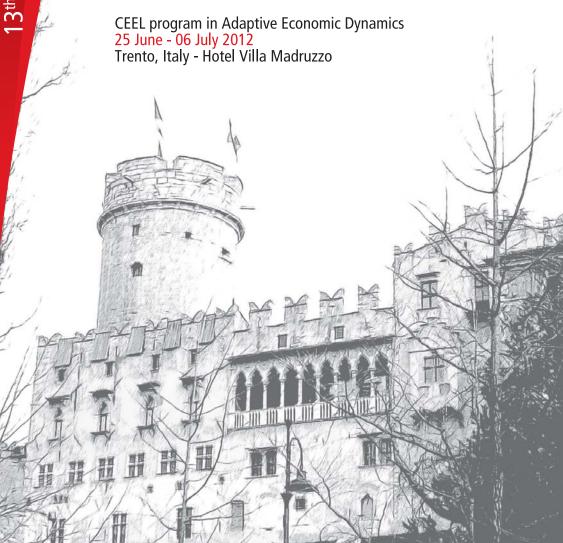




13<sup>th</sup> Trento Summer School Intensive course in

# Market Design: Theory and Pragmatics



# Market Design: Theory and Pragmatics

## **Summary of the Course**

For the last several centuries, markets have spread spontaneously and have organized an increasing share of human activity. Globalization and information technologies accelerated the process in the early 21st century and, at the same time, opened unprecedented new opportunities for deliberate design.

Market design has much to learn from success stories like Amazon and eBay, online advertising, labour markets for medical interns and residents, wireless spectrum auction design, expressive auctions for sourcing, and mobile phone banking in the developing world. Market designers can also learn from disasters such as the California energy market of May 2000 through September 2001 and the credit-default swap market freeze in September 2008.

Market design is a multi-disciplinary problem with relevant expertise coming from economic theory, computer science, and operations research. Advances are made with the right combination of theory and pragmatics, with theoretical ideals balanced against requirements for computational and informational efficiency, as well as simplicity and robustness. The 2012 Trento Summer School faculty will bring together experts from many fields:

- artificial intelligence and multi-agent systems
- experimental economics
- · mechanism design theory
- prediction markets
- theoretical computer science

Students participating in this Summer School will gain an up-to-date overview of the relevant theory, current evidence on what sorts of market formats work well under various conditions, and pragmatic issues that arise when theoretical paradigms meet real-world challenges.

The ideal candidates for the School are Ph. D students and post doctoral students in economics, computer science and operations research.

Co-Directors of the school Dan Friedman, Economics Department, Santa Cruz University CA

David Parkes, School of Engineering and Applied Sciences, Harvard University

**Guest lecturers** 

Tuomas Sandholm, School of Computer Science Department,

Carnegie Mellon University

Peter Cramton, Economics Department, University of Maryland Paul J. Healy, Economics Department, Ohio State University

S. N. Muthu Muthukrishnan, Computer Science Department, Rutgers University

Estelle Cantillon, ECARES, Université Libre de Bruxelles

**Program Directors** 

Axel Leijonhufvud, UCLA and University of Trento

Enrico Zaninotto, University of Trento

**CEEL Director** 

Luigi Mittone, University of Trento

Lab Technical Assistant

Marco Tecilla, University of Trento

This is the 13<sup>th</sup> of a series of intensive courses to be offered by the Cognitive and Experimental Economics Laboratory (CEEL) with the financial support of John S. Latsis Public Benefit Foundation, an Athens-based Foundation supporting public benefit activities in Greece and abroad: www.latsis-foundation.org.

#### Previous intensive courses were offered in:

Computable Economics (2000): Director Kumaraswamy Vela Velupillai of the University of Trento.

Experimental Economics (2001): Director Daniel Friedman of the University of California, Santa Cruz. Adaptive Economic Processes (2002): Director Peter Howitt of Brown University.

Behavioral Economics (2003): Directors Daniel Friedman of the University of California, Santa Cruz and David Laibson of Harvard.

Institutional Economics (2004): Director Richard N. Langlois of the University of Connecticut.

Evolutionary Economic Dynamics (2005): Directors Ken Binmore of the University College, London and Larry Samuelson of the University of Wisconsin.

Agent-Based Computational Economics (2006): Directors Leigh Tesfatsion, Iowa State University and Robert Axtell, The Brookings Institution.

Agent-Based Finance (2007): Directors Cars Hommes, University of Amsterdam and Thomas Lux, University of Kiel.

Financial Instability and Crises (2008): Directors Domenico Delli Gatti, Università Cattolica del Sacro Cuore di Milano and Mauro Gallegati, Università Politecnica delle Marche, Ancona.

Networks and Innovation (2009): Directors John Padgett, University of Trento and University of Chicago, Lee Fleming, Harvard Business School and Massimo Riccaboni, University of Trento.

Macroeconomics and Financial Crises (2010): Directors Peter Howitt, Brown University, Daniel Heymann, University of Buenos Aires, Axel Leijonhufvud, UCLA and University of Trento.

Evolution of Social Preferences (2011): Directors Dan Friedman, University of California Santa Cruz and Luigi Mittone, University of Trento.

### **Application Procedure**

Persons interested in participating in the Summer School should fill-in the application form online and submit the following:

- 1. a detailed Curriculum Vitae (please mention any previous summer school or similar activity attended)
- 2. a two-page essay describing their interest in Market Design
- 3. a course transcript from their Ph.D program including advanced examinations passed
- 4. two letters of recommendation
- 5. statements about their current or projected research

The Trento Summer Schools are intended for Ph.D students and post-doctoral scholars.

#### The deadline for application is 17 March 2012.

Admissions decisions will be made and announced by 10 April 2012. All applicants will be informed by email about the results.

Participation at the summer school is free of charge. Food and accommodation will be covered by the School (except for meals during the weekend) and participants will have to cover travel expenses. Note: in order to be admitted students are required to attend the entire two weeks of the school.

A limited amount of grants are available for applicants from outside Western and Northern Europe and North America. A request of grant together with the motivational letter should be submitted together with the application.

Lesson's will begin on Monday 25 June 2012 in the morning (Sunday evening: social dinner) and will end on Friday 06 July 2012 at 13.00. Participants are expected to arrive on Sunday 24 June 2012 in the afternoon and leave on Friday 06 July 2012 in the afternoon (or Saturday morning by 10.00).

For logistical questions and application forms please contact the Summer School secretary at <a href="mailto:ccschool@economia.unitn.it">ccschool@economia.unitn.it</a> or consult our web page at

www-ceel.economia.unitn.it



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