



UNIVERSITY OF TRENTO - Italy

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John S. Latsis
Public Benefit Foundation

14th Trento Summer School
Intensive course in

Modularity and Design for Innovation

CEEL program in Adaptive Economic Dynamics
01 July - 12 July 2013
Trento, Italy - Hotel Villa Madruzzo



Modularity and Design for Innovation

Summary of the Course

As markets expand and technology grows more sophisticated, it becomes crucial to understand the process and problems of designing complex systems. This two-week summer school will use the concept of modularity as an entree into the science of design, with applications ranging from software and physical products to organizations and social institutions. One important focus will be the ways in which design principles shape, and are shaped by, the speed and direction of innovation.

In its modern guise, the concept of modularity as a design principle was articulated in the 1960s by scholars like Herbert Simon and Christopher Alexander. By isolating subsystems in an intelligent way, a modular (or nearly decomposable) design can ensure overall coherence among those subsystems while minimizing the costs of communication and coordination. These ideas have since been refined, extended – and criticized – by a wide range of scholars in the modern science of design.

The 2013 Trento Summer School faculty will bring together some of the best-known and most-influential scholars in this field, representing a variety of disciplines – product design, strategy, finance, economics.

Lecture topics will include:

- Modularity vs. integrality: theory and tradeoffs.
- Design Structure Matrices.
- Modularity and option value.
- Formal modeling of learning in design spaces.
- Multisided-sided markets and the economics of platforms.
- Open and user innovation; intellectual property.
- Designing organizations and institutions.

Students participating in this Summer School will gain an up-to-date overview of the relevant theory, exposure to case studies from a variety of industries and contexts, and an opportunity to present their own work and receive comments from School faculty.

The ideal candidates for the School are Ph.D. students, post-doctoral fellows, and newly minted researchers in technology and operations management, strategy, finance, and the economics of organizations and institutions.

Director of the school	Richard Langlois, University of Connecticut
Honorary lecturer	Carliss Y. Baldwin, Harvard Business School
Guest lecturers	Annabelle Gawer, Imperial College London Business School. Jason Woodard, School of Information Systems - Singapore Management University Luigi Marengo, LEM (Laboratory of Economics and Management)-Scuola Superiore Sant'Anna-Pisa Stefano Brusoni, Swiss Federal Institute of Technology Zürich (ETH)
Program Directors	Axel Leijonhufvud, UCLA and University of Trento Enrico Zaninotto, University of Trento
Director of CEEL	Luigi Mittone, University of Trento
Tutor	Nicholas Garrido, Universidad Católica del Norte, Chile

This is the 14th 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, and of the Institute for New Economic Thinking (INET) <http://ineteconomics.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.

Market Design: Theory and Pragmatics (2012): Directors Dan Friedman, University of California Santa Cruz and David Parkes, Harvard University.

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-pages essay describing their interest in Modularity and Design for innovation,
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 20 April 2013.

Admissions decisions will be made and announced by 10 May 2013. All applicants will be informed by e-mail 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.

Lessons will begin on Monday 1 July 2013 in the morning (Sunday evening: social dinner) and will end on Friday 12 July 2013. Participants are expected to arrive on Sunday 30 June 2013 in the afternoon and leave on Friday 12 July 2013 in the afternoon.

For logistical questions and application forms please contact the Summer School secretary at ccschool@economia.unitn.it or consult our web page at

www-ceel.economia.unitn.it



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