

# **Doctoral summer school on Economic Science with Heterogeneous Interacting Agents**

*Castellon del la Plana, 20-21 June 2016*

## **Why Economic Models with Heterogeneous interacting agents:**

We aim to introduce scholars to some basic concepts and instruments used in a wide range of economic models. Specifically we present agent-based and experimental economics as the main tools to describe the relationship between the organization of interaction among individuals within different components of the economy and overall aggregate behavior. The focus is on the ways in which economic agents interact and the possible consequences of their interaction on the economic system.

The interaction between economic agents (such as households, firms, financial intermediaries and traders) and the environment, in fact, generates dynamic patterns, characterized by the endogenous emergence of deep disequilibria and sudden state transitions which characterize many financial and real time series. This is the reason why interaction have been gaining attention both within the academic debate and among international institutions and policymakers.

## **To whom is the summer school addressed?**

This Summer School is addressed to highly motivated graduate and Ph.D. students, as well as researchers working for public and private research centers, who want to integrate their curricula with the analytical and technical tools developed within this innovative field of study.

## **Aims and Objectives**

Students will be introduced to the logic of macroeconomic and financial Agent Based modeling and will progressively come to master the fundamental tools required to build and analyze an Agent Based model. Specifically, on the one hand, it will pay great attention to the macroeconomic and financial modeling. On the other hand, some innovative techniques able to describe agents' behavioral rules and expectations will be introduced. In this respect, the objective is to introduce participants to the essential characteristics of the experimental economics, seen as a tool able to detect agents' strategies and expectations. Last but not least, we will propose sophisticated statistical tools able not only to analyze emergent stylized facts in the simulated time series, but also to investigate the statistical properties of real data.

In addition, the summer school will cover some complementary aspects of model-building techniques, such as methods for economic networks analysis.

## **Organizers**

The Summer School is jointly organized by the Universidad Jaume I (Castellon, Spain) and the Laboratorio Economía Experimental (LEE), with the financial support of the Institute for New Economic Thinking (INET).

### Coordinators:

Simone Alfarano (UJI)

Eva Camacho (UJI)

Thomas Lux (Kiel University & UJI)

Gabriele Tedeschi (UJI)

Andrea Teglio (UJI)

## **Why You Should Join Our Summer School**

If you are a highly motivated student at Ph.D. level, or you are working with a research center or a public institution and want to get involved in one of the most innovative and promising approaches to economic thinking, our Summer School will give you the opportunity to:

- Spend 2 days in the nice city of Castellon studying, discussing, and exchanging experiences with international students and lecturers.
- Confront your research ideas and outputs in a friendly, easygoing atmosphere with established scholars and young researchers in the field of AB Economics and Experimental economics.
- Learn how to design, develop, analyze, and display your own models.

## **Organization of the Courses**

The schedule is the following: 6 hours of classes per day, 2 full working days. In principle, 6 hours (in the morning and early afternoon) will be devoted to frontal lectures, equally distributed between classes dealing with theoretical and methodological aspects.

## **Application Procedure**

The number of participants is restricted to 25. We will thus only consider applicants with strong interest in the field.

An expression of interest must be sent via mail before **March 31 2016** to **wehia2016@gmail.com** attaching an updated CV. Later applications will also be evaluated, but only in the case of free posts.

## **Participation Fee**

The Summer School admission is **free of charge**. Organizers will provide lunches and coffee breaks. Due to limited available funding, other expenses, such as dinners, travels, lodging, will not be covered by organizers.

**IMPORTANT:** Since the summer school is two days before the WEHIA conference, we stress that the two events are "independent". So, researchers participating at the summer school are not automatically allowed to take part to the WEHIA. In case they want, a regular registration to the conference (including the payment of the conference fee) is needed by **20 March**.

## **Teaching Board**

Alfarano Simone: Universidad Jaume I, Castellón .

Assenza, Tiziana: Università Cattolica del Sacro Cuore, Milano

Bottazzi Giulio, Scuola Superiore Sant Anna, Italy

Camacho Eva: Universidad Jaume I, Castellón .

Cincotti Silvano: Università di Genova.

George Co-Pierre: University of Cape Town, South Africa,

Lux Thomas: Kiel University.

Tedeschi Gabriele: Universidad Jaume I of Castellón

Teglio Andrea: Universidad Jaume I of Castellón

## **Contacts and Further Information**

Further useful information, details, materials, contacts, links, will be available on the Summer School website <http://catedrabde.uji.es/wehia/index.html> as soon as possible.

For any question please write to **wehia2016@gmail.com**.