

## **Course in Programming Economic Experiments with z-Tree**

Urs Fischbacher, Konstantin Hesler, and Irenaeus Wolff will offer a short course in z-Tree from March 3-5, 2014. There will be two sections offered, a beginner section (days 1 and 2) and an advanced section (day 3). As the name implies, the beginner section is intended for those just beginning with z-Tree, and the advanced section for those already experienced in programming with z-Tree. In the advanced section, we will also help to solve individual problems. So it is feasible to participate in both parts. Please send an email to Ulrike Mandausch ([ulrike.mandausch@uni-konstanz.de](mailto:ulrike.mandausch@uni-konstanz.de)) by January 15, 2014 with your name, email address, and which section you wish to attend if you wish to take part. As places are limited, we may not be able to accommodate all requests. You will receive an email by the end of January to confirm whether or not you may attend the course. The course will take place either at the Thurgauer Wirtschaftsinstitut (TWI) in Kreuzlingen, Switzerland or at the University of Constance in Constance, Germany, depending on the number of participants.

Beginner section: 9:00 AM to 5:00 PM, March 3 & 4, 2014

Advanced section: 9:00 AM to 5:00 PM, March 5, 2014

## Programming Economic Experiments with z-Tree

March 3 to 5, 2014, University of Konstanz

Urs Fischbacher, Konstantin Hesler, Irenaeus Wolff

Please register at [ulrike.mandausch@uni-konstanz.de](mailto:ulrike.mandausch@uni-konstanz.de)

In the course, we will present the main concepts and then there is time for individual work. You best arrive with your own laptop.

### Monday, March 3, 9am to 1pm

**Overview.** It is shown how a public goods experiment is programmed and tested. This unit gives a first overview of the structure of the program. Participants get a first impression how to program and to run experiments with z-Tree.

**Exercise.** First steps with z-Tree. Public goods game.

**Programming.** Payoff functions are defined in programs. The syntax of programs and the most important functions are presented. Furthermore, it will be shown how the programs are executed.

### Monday, March 3, 2pm to 5pm

**Exercise.** Programming.

**Layout.** The different user interface elements are presented and screen layout options are explained.

**Course of action.** It is shown how different courses of action are implemented: Asymmetric games, sequential move games, simple posted offer markets.

**Exercise.** Ultimatum game.

### Tuesday, March 4, 9am to 1pm

**Running a session.** First, we show how to run a "normal" session. Then, we deal with problems that may occur during a session (crash of a computer, subjects who make losses). Finally, it is shown how to install z-Tree in a way that makes conducting experiments most convenient.

**Matching and Parameter Table.** It is shown how individual parameters can be defined and how different group matching methods can be implemented (for instance partner and stranger matching).

**Exercise.**

**Market experiments.** It is shown how experiments with more complex market structures are programmed: Examples are single sided auction markets, double auction markets, posted offer markets, and Dutch auctions.

### Tuesday, March 4, 2pm to 5pm

**Exercise.** Double Auction.

**Graphics.** First, we present graphical representations like line and box charts. Then we will show how to program interactive graphics.

**Exercise.** Graphics.

### Wednesday, March 5, 9am to 1pm

**Engineering experiment.** We will discuss how to address complex programming problems in z-Tree.

**Future directions in the development.**

### Wednesday, March 5, 2pm to 5pm

**Problems.** We will discuss problems of the participants. Please submit problems to [urs.fischbacher@uni-konstanz.de](mailto:urs.fischbacher@uni-konstanz.de).