Electronic Markets
Summer Semester 2019

Course Description:

Electronic markets are an essential building block of today's networked service economy. We face them in automated stock exchanges, auctions at eBay and Google, as well as in industrial contracting. By enabling the trade and allocation of frequencies for wireless communication (UMTS, LTE) and emission certificates, electronic markets shape the future of our planet, our economies, and our societies. However, the design and implementation of market mechanisms is highly complex. Markets need to be protected from cheating by individual agents or full-blown market failures. The lecture “Electronic Markets” seeks to provide students with an understanding of how electronic market platforms are analyzed, designed, and introduced.

The topics covered in the lecture can be divided into three broad areas:

- **The microstructure.** This area includes rules that define how markets operate and covers, for instance, a recap of game theory and auction rules for single-unit and combinatorial auctions. This is the main focus of the lecture.
- **The IS infrastructure.** This area contains issues concerning the implementation of electronic markets, such as computational complexity.
- **The business structure.** This area outlines how the electronic market is offered to its customers and covers issues such as enforcement, trust, and monitoring.

Students learn to comprehend, to enhance, and to evaluate the design potentials of electronic market platforms. The participation in the exercise sessions is highly recommended. The exercises consist of a detailed discussion of the solutions of the exercise sheets.
Credit Points:

If you are a student within the M.Sc. VWL, M.Sc. BWL, M.Sc. Economics (profiles “Finance” and “Economics & Politics”), or M.Sc. Computer Science programs:

Electronic Markets is offered as 6 ECTS only.

Communication

All announcements and materials will be uploaded on ILIAS.

Timeframe and Location

Lecture

**Wednesday** 12 am – 02 pm     HS 3044
Start: April 24, 2019

Exercise

**Thursday** 02 pm to 04 pm     HS 3044
Start: tba

The exercise sessions will consist of exercise sheets. The exercise sheets will be discussed during the sessions.

The dates of the exercise sessions will be announced in the first lecture and in ILIAS.

Final Exam

The exam lasts for 90 minutes. Students are allowed to use a non-programmable calculator.

Bonus Points

Students can earn bonus points for submitting their printed solutions to the exercise sheets. There will be two exercise sheets. Students are awarded one point if they provide an answer to each problem. One more point, for having solved at least 50 percent of a sheet correctly and one additional bonus point for having solved at least 90 percent of an exercise sheet correctly. This implies that students can earn up to 6 bonus points in total. However, bonus points are only added, if the exam is passed. This means that the bonus points cannot save a student from failing the exam!
Accompanying Literature

There is no single accompanying book to this lecture, but several papers will be announced along the course. To get a general notion on the topics of designing electronic markets, please refer to the following three papers:


Policies and Procedures
Grading: final exam

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