Information Economics

Aleksei Smirnov

**Higher School of Economics,
Moscow**

- What is Information Economics?
    - Except that it is a part of Micro Theory no one can tell you significantly more.
    - Informally, just a collection of research areas where information plays a substantial role for the model's predictions.

- Before 70's the only existing models were the ones with perfect information:
  - it was believed that adding asymmetric/imperfect information is not only complicated, but is also useless.
- Akerlof (the market for lemons) and Spence (signaling) provided important examples where information structure matters for the results.

Current State

- Now IE constitutes approximately half of Micro Theory and is its most active field.
- Within the course we will cover both the origins of this field, and it's currently active topics.

Course Syllabus

- **Adverse Selection/Asymmetric Information**
  - Lemon's Market
  - Signaling & Screening
  - Disclosure
  - Moral Hazard

- **Information Transmission**
  - Cheap Talk and Reputation
  - Bayesian Persuasion
  - Global Games

- **Experimentation and Learning**
  - Clinical Trials and the Gittins Index
  - Strategic Experimentation

Course Grading

- 3 HA $= 15\%$ of the grade,

- Midterm $= 40\%$ of the grade,

- Final Exam $= 45\%$ of the grade.

Miscellaneous Information

- Instructor: Aleksei Smirnov (homepage link)
  - Research Interests: Dynamic Games of Information Transmission, Learning and Reputation Building, Voluntary Disclosure
  - Office Hours: by appointment
- Textbook
  - There is no textbook for this course. For all the topics slides will be self-contained. For some selected topics links to the original papers/overview papers/additional notes will be provided.
- Prerequisites
  - To deal with some of the aforementioned models the knowledge of Bayes' Rule, Taylor Series, Normal Distribution and Poisson Process is required.