

# Advanced Game Theory II

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Here is an outline of material that we will cover.

## Course Outline

### **Part 1. Foundations of Incomplete Information** (4 classes)

#### 1 *Common Knowledge and Rationality*

1.1 Agree to Disagree

1.2 Email Game

#### 2 *Incomplete Information and Robustness*

1.1 Harsanyi Type Spaces

1.2 (Bayes Nash) Equilibrium and Rationalizability

1.3 Bayes Correlated Equilibrium

### **Part 2. Information Design** (10 classes)

#### 1 Basics

1.1 Formulation

[Taneva \(2019\)](#).

1.2 Comparison to Cheap Talk

[Crawford and Sobel \(1982\)](#).

1.3 Dynamic foundation of commitment

[Mathevet, Pearce, and Stacchetti \(2018\)](#).

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- 1.4 Bayesian Persuasion
  - [Kamenica and Gentzkow \(2011\)](#)
  - [Lipnowski and Mathevet \(2018\)](#) (psychological audience).
- 2 Many Players
  - 2.1 Direct-revelation approach
    - [Taneva \(2019\)](#).
  - 2.2 Belief-based approach
    - [Mathevet and Taneva \(2020\)](#).
  - 2.3 Adversarial selection
    - [Mathevet and Taneva \(2020\)](#)
    - [Morris, Oyama, and Takahashi \(2020\)](#).
- 3 Selected Topics
  - 3.1 Sequential information design
    - [Doval and Ely \(2020\)](#)
  - 3.2 Information Design by an Informed Designer
    - [Koessler and Skreta \(2021\)](#)
  - 3.3 Persuasion via Weak Institutions
    - [Lipnowski, Ravid, and Shishkin \(2020\)](#)
  - 3.4 Persuasion with Limited Communication Capacity
    - [Le Treust and Tomala \(2019\)](#)
  - 3.5 Preparing for the Worst But Hoping for the Best: Robust (Bayesian) Persuasion
    - [Dworczak and Pavan \(2020\)](#)
  - 3.6 Attention Management
    - [Lipnowski, Mathevet, and Wei \(2020\)](#)
  - 3.7 Organized Information Transmission
    - [Mathevet and Taneva \(2020\)](#)
  - 3.8 Online Privacy and Information Disclosure by Consumers
    - [Ichihashi \(2020\)](#)

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