

Information design

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Office hours: Wednesday, after class, office C27.

Introduction to the course This course is a graduate-level introduction to information design. In analogy with mechanism design, information design concerns the optimal communication of information. Information design is applied to industrial organization, political economy, and finance. The background knowledge of mathematics and game theory that is expected from second-year PhD students at the Naples School of Economics is required for this course.

Structure The course covers 4 main topics.

1. Bayesian persuasion:
 - [Kamenica and Gentzkow \(2011\)](#), [Lipnowski and Ravid \(2020\)](#);
 - Surveys: [Kamenica \(2017\)](#), [Hörner and Skrzypacz \(2017\)](#), [Kamenica \(2019\)](#), [Bergemann and Morris \(2019\)](#).
2. Information-design approach to third-degree price discrimination:
 - [Bergemann, Brooks, and Morris \(2015\)](#), [Roesler and Szentes \(2017\)](#).
3. Persuasion of a privately informed receiver:
 - The mean-measurable model: [Das and Kamenica \(2015\)](#), [Gentzkow and Kamenica \(2016\)](#), [Kolotilin \(2018\)](#).
 - Persuasion mechanisms: [Kolotilin, Mylovanov, Zapechelnnyuk, and Li \(2017\)](#), [Guo and Shmaya \(2019\)](#), [Dall'Ara \(2024\)](#).
4. Bayes-correlated equilibrium and perspectives:
 - [Bergemann and Morris \(2016\)](#);
 - Repeated games with one-sided incomplete information: [Renault \(2018\)](#), [Forges \(2020\)](#);
 - Background reading: [Aumann \(1987\)](#), [Forges \(1993\)](#), [Bergemann and Morris \(2019\)](#).

Each student selects a paper from the following list, presents the paper in the last meeting, and submits a referee report of the paper.

List of papers

1. [Alonso and Câmara \(2016\)](#);
2. [Bergemann, Brooks, and Morris \(2017\)](#);
3. [Board and Lu \(2018\)](#).
4. [Guo and Shmaya \(2019\)](#);
5. [Dworczak \(2020\)](#);
6. [Kleiner, Moldovanu, and Strack \(2021\)](#);
7. [Yang \(2022\)](#);
8. [Bergemann, Heumann, Morris, Sorokin, and Winter \(2022\)](#);
9. [Ravid, Roesler, and Szentes \(2022\)](#);
10. [Yang and Zentefis \(2024\)](#);
11. [Strack and Yang \(2024\)](#);
12. [Inostroza and Pavan \(2025\)](#);
13. [Malenko, Malenko, and Spatt \(2025\)](#).
14. [Kartik and Zhong \(2025\)](#);
15. [Kolotilin and Wolitzky \(2024\)](#).

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