

Information design

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Office hours: Wednesday, after class, office C27.

Introduction to the course This course is PhD-level introduction to information design. In analogy with mechanism design, information design concerns the optimal disclosure 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 3 main topics.

1. Bayesian persuasion:
 - [Kamenica and Gentzkow \(2011\)](#), [Lipnowski and Ravid \(2020\)](#);
 - Surveys: [Kamenica \(2017\)](#), [Hörner and Skrzypacz \(2017\)](#), [Kamenica \(2019\)](#).
2. Persuasion of a privately informed receiver:
 - [Das and Kamenica \(2015\)](#), [Gentzkow and Kamenica \(2016\)](#), [Kolotilin, Mylovanov, Zapechelnyuk, and Li \(2017\)](#), [Bloedel and Segal \(2021\)](#), [Kolotilin, Mylovanov, and Zapechelnyuk \(2022\)](#), [Dall'Ara \(2024\)](#).
3. Bayes-correlated equilibrium and perspectives:
 - Bayes-correlated equilibrium: [Aumann \(1987\)](#), [Forges \(1993\)](#), [Bergemann and Morris \(2016, 2019\)](#);
 - Repeated games of incomplete information: [Renault \(2018\)](#), [Forges \(2020\)](#); for more background, consult [Laraki, Renault, and Sorin \(2019\)](#).

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 The first list contains papers leaning towards “pure theory” and the second list contains papers leaning towards “applied theory”, although the distinction is blurry.

1. Theory:

- (a) [Bergemann, Brooks, and Morris \(2017\)](#);
- (b) [Guo and Shmaya \(2019\)](#);
- (c) [Dworczak and Martini \(2019\)](#);
- (d) [Dworczak \(2020\)](#);
- (e) [Kleiner, Moldovanu, and Strack \(2021\)](#);
- (f) [Bergemann, Heumann, Morris, Sorokin, and Winter \(2022\)](#);
- (g) [Yang and Zentefis \(2024\)](#);
- (h) [Strack and Yang \(2024\)](#);
- (i) [Inostroza and Pavan \(2024\)](#);
- (j) [Kolotilin, Corrao, and Wolitzky \(2024\)](#);
- (k) [Kleiner, Moldovanu, Strack, and Whitmeyer \(2024\)](#).

2. Applied theory.

- (a) IO:
 - i. [Bergemann, Brooks, and Morris \(2015\)](#);
 - ii. [Roesler and Szentes \(2017\)](#);
 - iii. [Board and Lu \(2018\)](#).
- (b) Political economy:
 - i. [Alonso and Câmara \(2016\)](#);
 - ii. [Gehlbach, Luo, Shirikov, and Vorobyev \(2024\)](#);
 - iii. [Lauermann and Heese \(2024\)](#);
 - iv. [Kolotilin and Wolitzky \(2024\)](#).
- (c) Finance:
 - i. [Faria-e Castro, Martinez, and Philippon \(2016\)](#);
 - ii. [Goldstein and Leitner \(2018\)](#);
 - iii. [Alonso and Zachariadis \(2024\)](#);
 - iv. [Quigley and Walther \(2024\)](#);
 - v. [Malenko, Malenko, and Spatt \(2024\)](#).

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