

Econ 414-2: Economics of Information

Northwestern University, Spring 2022

Time: 1:30-3:20 Thu/Fri

Location: Frances Searle Building 2378 (Thu)/Kellogg 3301 (Fri)

Office hours: by appointment

Yingni Guo

1 Schedule

1.1 Contracting for information and delegation

1. Krishna and Morgan (2008), Goltsman et al. (2009)
2. Amador et al. (2006), Amador and Bagwell (2013), Guo (2016)
3. Armstrong and Vickers (2010), Frankel (2014)

1.2 Dynamic mechanisms

1. Linking incentives: Rubinstein (1979), Jackson and Sonnenschein (2007)
2. Optimal mechanisms (I): Athey and Bagwell (2001), Miralles (2012)
3. Optimal mechanisms (II): Fernandes and Phelan (2000), Grenadier et al. (2016)

1.3 Information design

1. Rayo and Segal (2010), Kamenica and Gentzkow (2011), Alonso and Câmara (2016)
2. Privately informed receiver: Kolotilin et al. (2017), Guo and Shmaya (2019a)
3. Dynamics: Kremer et al. (2014), Che and Hörner (2017)
4. BCE and its applications: Bergemann and Morris (2016b), Bergemann et al. (2015)

1.4 Robust mechanism design

1. Worst-case payoff: Carroll (2015), Carroll (2019)
2. Worst-case regret: Guo and Shmaya (2019b), Guo and Shmaya (2021)

2 Requirement

Students are required to read all papers, submit two referee reports and make a 50 minute presentation.

3 Logistics

We will divide each 110 minute lecture into two halves:

- 1:30 to 2:20
- 10 min break
- 2:30 to 3:20

References

- Philippe Aghion and Jean Tirole. Formal and real authority in organizations. *Journal of Political Economy*, 105(1):1–29, 1997.
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- Manuel Amador and Kyle Bagwell. The theory of optimal delegation with an application to tariff caps. *Econometrica*, 81(4):1541–1599, 2013.
- Manuel Amador, Iván Werning, and George-Marios Angeletos. Commitment vs. flexibility. *Econometrica*, 74(2):365–396, 2006.

- Itai Arieli and Yakov Babichenko. Private bayesian persuasion. *Journal of Economic Theory*, 182:185 – 217, 2019. ISSN 0022-0531.
- Mark Armstrong and John Vickers. A model of delegated project choice. *Econometrica*, 78 (1):213–244, 2010.
- Susan Athey and Kyle Bagwell. Optimal collusion with private information. *The RAND Journal of Economics*, 32(3):428–465, 2001. ISSN 07416261.
- Arjada Bardhi and Yingni Guo. Modes of persuasion toward unanimous consent. *Theoretical Economics*, 13(3):1111–1149, 2018.
- Dirk Bergemann and Stephen Morris. Information design, bayesian persuasion, and bayes correlated equilibrium. *American Economic Review: Papers and Proceedings*, 106(5):586–591, 2016a.
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- Dirk Bergemann, Benjamin Brooks, and Stephen Morris. The limits of price discrimination. *American Economic Review*, 105(3):921–57, March 2015.
- Bernard Caillaud and Jean Tirole. Consensus building: How to persuade a group. *American Economic Review*, 97(5):1877–1900, 2007.
- Gabriel Carroll. Robustness and linear contracts. *American Economic Review*, 105(2):536–63, 2015.
- Gabriel Carroll. Robustness in mechanism design and contracting. *Annual Review of Economics*, 11(1):139–166, 2019.
- Yeon-Koo Che and Johannes Hörner. Recommender Systems as Mechanisms for Social Learning*. *The Quarterly Journal of Economics*, 133(2):871–925, 12 2017. ISSN 0033-5533.
- Wouter Dessein. Authority and communication in organizations. *Review of Economic Studies*, 69:811–838, 2002.
- Ana Fernandes and Christopher Phelan. A recursive formulation for repeated agency with history dependence. *Journal of Economic Theory*, 91(2):223 – 247, 2000.

- Alexander Frankel. Aligned delegation. *American Economic Review*, 104(1):66–83, January 2014.
- Maria Goltsman, Johannes Hörner, Gregory Pavlov, and Francesco Squintani. Mediation, arbitration and negotiation. *Journal of Economic Theory*, 144(4):1397–1420, 2009.
- Steven R. Grenadier, Andrey Malenko, and Nadya Malenko. Timing decisions in organizations: Communication and authority in a dynamic environment. *American Economic Review*, 106(9):2552–81, September 2016.
- Yingni Guo. Dynamic delegation of experimentation. *American Economic Review*, 106(8):1969–2008, August 2016.
- Yingni Guo and Eran Shmaya. The interval structure of optimal disclosure. *Econometrica*, 87(2):653–675, 2019a.
- Yingni Guo and Eran Shmaya. Robust monopoly regulation. *Working paper*, 2019b.
- Yingni Guo and Eran Shmaya. Project choice from a verifiable proposal. *Working paper*, 2021.
- Matthew O. Jackson and Hugo F. Sonnenschein. Overcoming incentive constraints by linking decisions. *Econometrica*, 75(1):241–257, 2007.
- Emir Kamenica and Matthew Gentzkow. Bayesian persuasion. *American Economic Review*, 101(6):2590–2615, 2011.
- Anton Kolotilin, Tymofiy Mylovanov, Andriy Zapechelnjuk, and Ming Li. Persuasion of a privately informed receiver. *Econometrica*, 85(6):1949–1964, 2017.
- Ilan Kremer, Yishay Mansour, and Motty Perry. Implementing the ‘wisdom of the crowd’. *Journal of Political Economy*, 122(5):988–1012, 2014.
- Vijay Krishna and John Morgan. Contracting for information under imperfect commitment. *RAND Journal of Economics*, 39(4):905–925, 2008.
- Nahum D. Melumad and Toshiyuki Shibano. Communication in settings with no transfers. *The RAND Journal of Economics*, 22(2):173–198, 1991.
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