University Paris Panthéon-Assas

Applied Game Theory

The theory of costly signaling: applications in economics Spring term 2025

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Thursday, 9-11h50, Salle 42, Centre Desgoffe – first 6 weeks of the term

In this course, we investigate games of incomplete information and apply them to the study of costly signaling and strategic information transmission.

Session 1. Review: the basics of game theory Session 2. Nash equilibrium in mixed strategies, sequential Bayesian Nash equilibrium Session 3. Costly signaling games Session 4. Application: advertising Session 5. Application: dividend payments Session 6. Application: blockholders in firms

Problem-set sessions

Salle 41, Centre Desgoffe

Friday, February 14: 9h-12h Friday, February 21: 9h-12h Friday, February 28: 9h-10h30

Evaluation of the course is based on your paper. See my website -> "Your final paper": https://signaling.u-paris2.fr/Pawlowitsch/2024-Applied-Game-Theory-your-essay.pdf

Evaluation of the problem-set session is based on your presentation as well as your participation in class.

References

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Cho, I-K. and D. M. Kreps. 1987. "Signaling games and stable equilibria." The Quarterly Journal of Economics 102 (2): 179–221.

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Kreps, D. M., Sobel, J. 1994. "Signalling." In *Handbook of Game Theory*, Vol. 2, edited by R. J. Aumann and S. Hart, 849–867. Amsterdam/New York: Elsevier.

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Miller, M. H., Rock, K. 1985. "Dividend policy under asymmetric information." The Journal of Finance XL (4), 1031–1051.

Sobel, J. 2009. "Signaling Games." In *Encyclopedia of Complexity and System Science*, edited by R. Meyers, 8125–8139. New York: Springer.

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