

# Advanced Microeconomics

Jérôme Mathis (LEDa)

[jerome.mathis@dauphine.fr](mailto:jerome.mathis@dauphine.fr)

## **Chapter 1. Incomplete information games**

Adverse selection

Games of incomplete information

Solving Bayesian games

Dynamics

Education as signalling

Cheap talk

Correcting false positive clinical test result

Evidence from a simplified poker

## **Chapter 2. Theory of Incentives: adverse selection**

Model

Complete information optimal contract

Incomplete information optimal contract

## **Chapter 3. Theory of Incentives: moral hazard**

Model

Complete information optimal contract

Incomplete information optimal contract

## **Chapter 4. Industrial Organization: Static Models of Oligopoly**

Bertrand Paradox

Cournot Market Structure

Stackelberg: sequential moves

Capacity and price game

## **Chapter 5. Industrial Organization: Product Differentiation**

Horizontal Differentiation

Vertical differentiation

## **Chapter 6. Repeated Game applied to Industrial Organization**

Solving Prisoner's dilemma

Discounting  
Folk Theorem  
Collusion in Prices  
Collusion and market concentration  
Collusion and fluctuating demand

### **Bibliography (books)**

Laffont, Jean-Jacques; Martimort, David (2002). *The theory of incentives: the principal-agent model*. Princeton, New Jersey: Princeton University Press.

George J. Mailath, Larry Samuelson (2006). *Repeated Games and Reputations: Long-run Relationships*. Oxford University Press

Roger B. Myerson. *Game Theory: Analysis of Conflict*.

Martin J. Osborne, Ariel Rubinstein. *A Course in Game Theory*. MIT Press

Jean Tirole (1988). *The Theory of Industrial Organization*, MIT Press.

### **Bibliography (papers)**

d'Aspremont, C., Gabszewicz, J.-J. and Thisse, J.-F. (1979): "On Hotelling's 'Stability in competition'" *Econometrica*, 47: 1145-1150

Berry, Steven and Joel Waldfogel (1999) : "Free Entry and Social Inefficiency in Radio Broadcasting", *RAND Journal of Economics*, vol. 30, issue 3, pages 397-420

Economides, Nicholas (1989): "Symmetric equilibrium existence and optimality in differentiated product markets," *Journal of Economic Theory*, Elsevier, vol. 47(1), pages 178-194, February.

Gabszewicz, J. & Thisse, J. -F. (1979): "Price competition, quality and income disparities," *Journal of Economic Theory*, vol. 20, issue 3, pages 340-359

Gabszewicz, J. & Thisse, J. -F. (1980): "Entry (and exit) in a differentiated industry," *Journal of Economic Theory*, vol. 22(2), pages 327-338.

Schultz, Christian (2004): "Market transparency and product differentiation". *Economics Letters*, vol. 83, issue 2, pages 173-178.

Steven C. Salop (1979): "Monopolistic Competition with Outside Goods", *The Bell Journal of Economics*, Vol. 10, No. 1 , 141-156.

Shaked, A. and J. Sutton (1982): "Relaxing Price Competition through Product Differentiation," *Review of Economic Studies*, 49, pp.3-13.

Shaked, A. and J. Sutton (1983): "Natural Oligopolies," *Econometrica*, 51, pp.1469-83.