

## PRESENTATION OF THE PUBLICATIONS BY DOMAINS [\[Pdf File\]](#)

### Topics in General Equilibrium Theory

#### **Books and Proceedings**

*Contributions to Operations Research and Economics : The XXth Anniversary of CORE*, The M.I.T Press, Cambridge, 1989, co-editor with H. Tulkens (561 pages).

*Modélisation et décisions économiques*, De Boeck Wesmael Belgium, 1990, co-editor with H. Tulkens (227 pages).

*General Equilibrium Theory and Applications*, International Symposia in Economic Theory and Econometrics ; Cambridge University Press, 1991, co-editor with W.A. Barnett, C. D'Aspremont, J. Gabszewicz, A. Mas-Colell (480 pages).

*Special Issue on Mathematical Economics*, Guest Editor of the Special Issue of *Positivity*, Kluwer, Dordrecht, vol. 6 Nos 3, 2002 (167 pages) (with R. Aliprantis and R. Tourky).

Mathematics and Economics, in *First European Congress of Mathematics, Vol. III*, A. Joseph, F. Mignot, F. Murat, B. Prum, R. Rentschler (eds.), Progress in Mathematics, Birkhauser Verlag (1994) 431--450.

Introduction to the Special Issue on Mathematical Economics, *Positivity*, 6 3 (2002) 201--204 (with C.-D. Aliprantis, and R. Tourky).

#### **Equilibrium Theory with Satiated Consumers**

Equilibrium Theory with a Measure Space of Possibly Satiated Consumers, *Journal of Mathematical Economics*, (2003) accepted (with M. Topuzu and A. Yildiz). [\[Pdf File\]](#)

#### **Spatial Economies**

A General Equilibrium Model of Spatial Economies: the Case of Infinite Locations, *Economic Theory*, (2003) accepted (with J.-P. Médecin). [\[Pdf File\]](#)

A General Equilibrium Model of Spatial Economies: the Case of Finite Locations, *Cahiers de la MSE, Série Bleue du CERMSEM*, 2002.101 (with J.-P. Médecin).

Existence of Equilibria in Economies with a Continuum of Consumers and Consumption Dependent Endowments, *Cahiers de la MSE, Série Bleue du CERMSEM*, 2002.100 (with J.-P. Médecin).

#### **Incomplete Markets and Asymmetric Information**

Existence of Financial Equilibria: Transfert Spaces of Fixed Dimensions, *Working paper* Université Paris 1, (1997) (with P. Bich). [\[Pdf File\]](#)

Fixed-point-like Theorems on Subspaces, *Working paper*, Université Paris 1, (1997) (with P. Bich). [\[Pdf File\]](#)

Arbitrage and Price Revelation with Asymmetric Information and Incomplete Markets, *Journal of Mathematical Economics*, 38 4 (2002) 393--410 (with L. De Boisdeffre). [\[Pdf File\]](#)

#### **Existence, Optimality and Uniqueness**

A Remark on the Uniqueness of Equilibria, *Working paper*, Université Paris 1 (1988).

Economic Equilibrium  $\square$  Optimality and Price Decentralization, *Positivity*, 6 3 (2002) 205-241 (with C.-D. Aliprantis, and R. Tourky). [\[Pdf File\]](#)

## Equilibrium Theory with Increasing Returns

### Presentation

*General Equilibrium Theory and Increasing Returns*, Guest Editor of the Special Issue of the *Journal of Mathematical Economics*, North-Holland, Amsterdam, vol. 17 Nos 2/3 1988 (315 pages).

General equilibrium theory and increasing returns: presentation, *Journal of Mathematical Economics*, 17 (1988) 103--118. [\[Pdf File\]](#)

La théorie de l'équilibre général de Arrow-Debreu : présentation et extension au cadre non-convexe, *Annales de l'Institut Henri Poincaré : Analyse Nonlinéaire* (1990) 161-181.

### Existence of Equilibrium

Existence of equilibria when firms follow bounded losses pricing rules, *Journal of Mathematical Economics*, 17 (1988) 119--147 (with J.-M. Bonnisseau). [\[Pdf File\]](#)

Existence of equilibria in economies with increasing returns, *Contributions to Operations Research and Economics: The XXth Anniversary of CORE*, B. Cornet and H. Tulkens (eds.), The M.I.T. Press, Cambridge (1989) 79--97.

Existence of marginal cost pricing equilibria in an economy with several nonconvex firms, *Econometrica* 58 (1990) 661--682 (with J.-M. Bonnisseau). [\[Pdf File\]](#)

Existence of marginal cost pricing equilibria: the nonsmooth case, *International Economic Review*, 31 (1990) 685--708 (with J.-M. Bonnisseau). [\[Pdf File\]](#)

Equilibrium Theory with Increasing Returns: the Existence Problem, *General Equilibrium Theory and Applications*, W. Barnett et al (eds.), International Symposia in Economic Theory and Econometrics, Cambridge University Press, (1991) 65--82 (with J.-M. Bonnisseau).

Topological properties of the attainable set in a non-convex production economy, *Journal of Mathematical Economics*, 17 (1988) 275--292. [\[Pdf File\]](#)

### Equilibria and Pareto Optima

Valuation equilibrium and Pareto optimum in nonconvex economies, *Journal of Mathematical Economics*, 17 (1988) 293--308 (with J.-M. Bonnisseau). [\[Pdf File\]](#)

Tarification au coût marginal et Pareto optimalité, *Mélanges économiques, Essais en l'honneur d'Edmond Malinvaud*, P. Champsaur et al (eds.), Economica, Paris (1988) 29--70. Translated as: Marginal Cost Pricing and Pareto Optimality, *Essays in Honor of Edmond Malinvaud*, P. Champsaur et al (eds.), The M.I.T. Press, Cambridge (1990). [\[Pdf File\]](#)

Separation Theorems and Supporting Price Theorems for Nonconvex sets, *Working paper*, Université Paris 1 (with R.-T. Rockafellar) (1995).

The Second Welfare Theorem in Nonconvex Economies, *Working paper*, Université Paris 1 (1995).  
Economic Equilibrium  $\square$  Optimality and Price Decentralization, *Positivity*, 6 3 (2002) 205-241 (with C.-D. Aliprantis, and R. Tourky). [\[Pdf File\]](#)

## Dynamic Models in Economics

### **Decentralized Planning Procedures**

An abstract theorem for planning procedures, *Lecture Notes in Economics and Mathematical Systems*, **144** (1977) 53--59.

Accessibilité des optima de Pareto par des processus monotones, *Comptes Rendus de l'Académie des Sciences*, série A **285** (1977) 641--645.

Sur la neutralité d'une procédure de planification, *Cahiers du Séminaire d'Econométrie*, **19** (1977) 71--81.

On planning procedures defined by multivalued differential equations, in *Systèmes Dynamiques et Modèles Economiques, Colloque International du C.N.R.S.* **259** (1978) 111--122.

Monotone planning procedures and accessibility of Pareto optima, in *New Trends in Dynamic System Theory and Economics*, Aoki et Marzollo (eds.), Academic Press (1979) 337--349.

Neutrality of planning procedures, *Journal of Mathematical Economics*, **11** (1983), 141-160. [\[Pdf File\]](#)

### **Exchange Processes**

Gradient Methods and Exchange Processes, *Working Paper INSEE*, Paris 7905 (1979).

Walrasian exchange processes," in *Economic Decision-Making: Games, Econometrics and Optimisation, Contributions in Honor of Jacques H. Drèze*, J. J. Gabszewicz et al (eds.), North Holland, Amsterdam (1990) 3--13 (with Paul Champsaur). [\[Pdf File\]](#)

### **Dynamic Processes**

Existence of slow solutions for a class of differential inclusions, *Journal of Mathematical Analysis and Applications*, **96** (1983) 130--147.

Théorèmes de viabilité pour les inclusions différentielles du second ordre, *Israel Journal of Mathematics*, **57** (1987) 225--238 (with G. Haddad).

## **Fixed-Point Theory and Equilibrium Theory**

### **Classical (Convex) Fixed-Point Theory**

Paris avec handicaps et théorèmes de surjectivité de correspondances, *Comptes Rendus de l'Académie des Sciences*, série A **281** (1975) 479--482.

Règles de décision en théorie des jeux et théorèmes de points fixes, *Comptes Rendus de l'Académie des Sciences*, série A **282** (1976) 11--14 (with J.-P. Aubin).

Un théorème de surjectivité pour une procédure de planification, *Comptes Rendus de l'Académie des Sciences*, série A **282** (1976) 1375--1378 (with J.-M. Lasry).

### **Fixed-Point Theory on Nonconvex Domains**

Fixed-point theorems and Morse's lemma for Lipschitzian functions, *Journal of Mathematical Analysis and Applications*, **151** (1990) 532--549 (with J.-M. Bonnisseau).

Necessary and sufficient conditions for the existence of (generalized) equilibria on a compact epi-Lipschitzian domain," in *Communications on Applied Nonlinear Analysis*, **7** (2000) 21--53 (with M.-O. Czarnecki). [\[Pdf File\]](#)

Existence of generalized equilibria of correspondences, *Nonlinear Analysis*, **44** 5 (2001) 555--573 (with M.-O. Czarnecki). [\[Pdf File\]](#)

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Fixed-point-like Theorems on Subspaces, *Working paper*, Université Paris 1, (1997) (with P. Bich). [\[Pdf File\]](#)

### **Approximation Methods and Fixed-Point Theory**

Méthodes d'approximation en théorie du point-fixe et de l'équilibre, *Comptes Rendus de l'Académie des Sciences de Paris*, **327** Série I, (1998) 917--922 (with M.-O. Czarnecki). [\[Pdf File\]](#)

Approximation methods in equilibrium and fixed-point theory: proximally nondegenerate sets," *Proceedings 9th Belgian-French-German Conference on Optimization*, Namur, Lecture Notes in Economics and Mathematical Sciences, Springer Verlag, Eds. V.H. Nguyen, J.-J. Strodiot and P. Tossings, (2000) 91--110 (with M.-O. Czarnecki). [\[Pdf File\]](#)

## **Mathematical Programming**

### **Sensitivity Analysis in Mathematical Programming**

*Nonlinear Analysis and Optimization*, Guest Editor of the Special Issue of *Mathematical Programming Study*, vol. **30**, North-Holland, Amsterdam, 1987, with V.H. Nguyen and J.-P. Vial (182 pages).

Lipschitzian solutions of perturbed nonlinear programming problems, *SIAM Journal of Control and Optimization*, **24** (1986) 1123--1137 (with J.-P. Vial).

Optimization: sensitivity analysis, in *Systems and Control Encyclopedia, Theory, Technology, Applications*, M. G. Singh (ed.), Pergamon Press, Oxford (1987) 3547--3551.

Lipschitz properties of solutions in mathematical programming, *Journal of Optimization Theory and Applications*, **53** (1987) 407--427 (with G. Laroque).

Regularity properties of open tangent cones, *Mathematical Programming Study*, **30** (1987), 17--33.

### **Approximation and Representation of Nonconvex Sets**

Représentation lisse de sous-ensembles épi-lipschitziens de  $\mathbb{R}^n$ , *Comptes Rendus de l'Académie des Sciences de Paris*, **325** Série I, (1997) 475--480 (with M.-O. Czarnecki).

Approximation normale de sous-ensembles épi-lipschitziens de  $\mathbb{R}^n$ , *Comptes Rendus de l'Académie des Sciences de Paris*, **325** Série I, (1997) 538--588 (with M.-O. Czarnecki).

Smooth approximations of epi-Lipschitzian sets, *SIAM Journal of Control and Optimization*, **37** (1999) 710--730 (with M.-O. Czarnecki).

Smooth representations of epi-Lipschitzian subsets of  $\mathbb{R}^n$ , *Nonlinear Analysis*, **37** (1999) 139--160 (with M.-O. Czarnecki). [\[Pdf File\]](#)

### **Fatou's lemma and Integration**

Fatou's Lemma for Gelfand Integrable Mappings, *Positivity*, **6** 3 (2002) 297--315 (with J.-P. Medecin). [\[Pdf File\]](#)

Fatou's Lemma for Unbounded Gelfand Integrable Mappings, *Cahiers de la MSE, Série Bleue du CERMSEM*, 2002.109 (with F. Martins Da Rocha). [\[Pdf File\]](#)

### ***Dynamic Processes***

Existence of slow solutions for a class of differential inclusions, *Journal of Mathematical Analysis and Applications*, **96** (1983) 130--147.

Théorèmes de viabilité pour les inclusions différentielles du second ordre, *Israel Journal of Mathematics*, **57** (1987) 225--238 (with G. Haddad).