



**Rabia NESSAH**

**Ph.D. in Industrial Systems and Optimization**

**Full Professor, Quantitative Methods**

r.nessah@ieseg.fr

## **EDUCATION**

**2013** HDR, Economics and Mathematics Sciences, Economics, University of Paris Est, France

**2005** Ph.D. in Industrial Systems and Optimization, Technologic University of Troyes, France

## **RESEARCH INTERESTS**

Economics, Operations Management, Quantitative Methods

## **EMPLOYMENT EXPERIENCE**

### **ACADEMIC:**

**2006 - Present** Professor, IÉSEG School of Management, Lille, France

**2002 - 2006** Lecturer, Technologic University of Troyes, Troyes, France

**2001 - 2002** Lecturer, Université de Tizi-Ouzou, Tizi-Ouzou, Algeria

## **COURSES TAUGHT**

- Introduction aux methodes d'optimisation, Grande ecole
- Le controle qualite : methodes et interpretations, Grande ecole
- Planification et ordonnancement de la production, Grande ecole
- Méthodes d'optimisation non linéaire et applications
- Planification et ordonnancement de la production

## **INTELLECTUAL CONTRIBUTIONS**

### **Papers in refereed journals**

#### **Published**

Courtois P., Nessah R., Tazdait T., (2017), Existence and computation of Berge equilibrium and of two refinements , *Journal of Mathematical Economics*, 72, pp. 7-15

- Nessah R., Parvulescu R., (2017), On the Existence of Pareto Efficient Nash Equilibria in Discontinuous Games, *International Game Theory Review*, 19(3), pp. 1750014-1-13
- Joliet R., Nessah R., (2016), Euro white and Euro Yolk: Sovereign Debt Structure Stability in the Eurozone, *International Game Theory Review*, 18(03), pp. 1650004-1-15
- Nessah R., Tian G., (2016), On the Existence of Nash Equilibrium in Discontinuous Games, *Economic Theory*, 61(3), pp. 515-540
- Courtois P., Nessah R., Tazdaït T., (2015), How to Play Games? Nash Versus Berge Behavior Rules, *Economics and Philosophy*, 31(1), pp. 123-139
- Nessah R., Larbani M., Tazdaït T., (2015), Coalitional ZP-equilibrium in games and its existence, *International Game Theory Review*, 17(3), pp. 15500021-155000218
- Nessah R., Larbani M., (2014), Berge-Zhukovskii equilibria : Existence and characterization, *International Game Theory Review*, 16(4), pp. 145000121-1450001211
- Nessah R., Pottier A., (2014), Berge-Vaisman and Nash equilibria: Transformation of games, *International Game Theory Review*, 16(4), pp. 14500091-14500098
- Nessah R., Tian G., (2014), On the Existence of Strong Nash Equilibria, *Journal of Mathematical Analysis and Applications*, 414(2), pp. 871-885
- Nessah R., Tazdait T., (2013), Absolute optimal solution for a compact and convex game, *European Journal of Operational Research*, 224(2), pp. 353–361
- Nessah R., Tian G., (2013), Existence of solution of minimax inequalities, equilibria in games and fixed points without convexity and compactness assumptions, *Journal of Optimization Theory and Applications*, 157(1), pp. 75-95
- Nessah R., Kacem I., (2012), Branch-and-bound method for minimizing the weighted completion time scheduling problem on a single machine with release dates, *Computers & Operations Research*, 39(3), pp. 471-478
- Nessah R., (2011), Generalized Weak Transfer Continuity and Nash Equilibrium, *Journal of Mathematical Economics*, 47(4-5), pp. 659-662
- Nessah R., Chu C., (2010), A Lower Bound for Weighted Completion Time Variance, *European Journal of Operational Research*, 207(3), pp. 1221-1226
- Nessah R., Chu C., (2010), Infinite Split Scheduling: A New Lower Bound of Total Weighted Completion Time on Parallel Machines with Job Release Dates and Unavailability Periods, *Annals of Operations Research*, 181(1), pp. 359-375
- Larbani M., Nessah R., (2008), A Note on the Existence of Berge and Berge-Nash Equilibria, *Mathematical Social Sciences*, 55(2), pp. 258–271
- Nessah R., Yalaoui F., Chu C., (2008), A branch and bound algorithm to minimize total weighted completion time on identical parallel machines with job release date, *Computers & Operations Research*, 35(4), pp. 1176-1190
- Nessah R., Larbani M., Tazdait T., (2007), A note on Berge equilibrium, *Applied Mathematics Letters*, 20(8), pp. 926-932
- Nessah R., Yalaoui F., Chu C., (2007), An exact method for Pm / sds, ri / Ci problem, *Computers & Operations Research*, 34(9), pp. 2840-2848
- Nessah R., Larbani M., (2005), Generalized g-quasivariational inequality, *International Journal of Mathematics and Mathematical Sciences*, 2005(21), pp. 3373-3385
- Nessah R., (2004), Existence of solutions for non linear inequalities in locally convex separated space, *Bulletin des Sciences Mathématiques*, 128(5), pp. 417-431
- Nessah R., Chu C., (2004), Quasi variational equation, *Mathematical Inequalities & Applications*, 7(1), pp. 149-160
- Larbani M., Nessah R., (2001), Sur l'équilibre fort selon Berge, *RAIRO - Operations Research*, 35, pp. 439-451

## **Communications in refereed conferences**

---

### **International**

- Parvulescu R., Nessah R., (2015), *Characterization of pure Nash equilibria with price-setting firms and production in advance* OLIGO 2015 Workshop, Madrid, Spain
- Joliet R., Nessah R., (2013), *Euro White and Euro Yolk: Sovereign Debt Structure in the Eurozone* 7th Annual Methods in International Finance Network (MIFIN) Workshop, Namur, Belgium
- Nessah R., Larbani M., Tazdaït T., (2013), *Beta-ZP-Equilibrium in Games and Its Existence* The 9th International Conference on Optimization: Techniques and Applications (ICOTA 9), Taipei, Taiwan
- Courtois P., Nessah R., Tazdaït T., (2011), *How to play the games? Nash versus Berge behavior rules* The 23rd Annual Meetings of the Human Behavior and Evolution Society, Montpellier, France
- Nessah R., Larbani M., Tazdaït T., (2009), *Strong Berge-Pareto Equilibrium: Existence and Relation with Strong Nash Equilibrium* The Sixth International Conference on Non Linear Analysis and Convex Analysis (NACA 2009), Tokyo, Japan
- Nessah R., Larbani M., (2008), *The Ky Fan Minmax Inequality without Convexity Assumption* Sixth International Meeting on Mathematical Analysis and its Applications (RAMA VI), Tizi-Ouzou, Algeria
- Nessah R., Chu C., Yalaoui F., Kacem I., (2006), *A branch and bound for  $1|ri|wiCi$  Scheduling Problem* Computational Engineering in Systems Applications, Beijing, China
- Nessah R., Yalaoui F., Chu C., (2006), *A branch and bound algorithm to minimize total weighted completion time on identical parallel machines with job release dates* International Conference, Service Systems and Service Management (IEEE SSSM'06), Troyes, France
- Nessah R., Larbani M., (2005), *On a nonlinear inequality* Abstracts of the Fourth International Conference on Nonlinear Analysis and Convex Analysis (NACA 2005), Okinawa, Japan
- Nessah R., Yalaoui F., Chu C., (2005), *A new method for the identical parallel machines scheduling problem with sequence dependent setup times and release dates* International Conference on Industrial Engineering and Systems Management (IESM 2005), Marrakech, Morocco
- Nessah R., Yalaoui F., Chu C., (2005), *Méthode exacte pour le problème  $Pm|ri|Ci$*  6e Congrès international de génie industriel, Besançon, France
- Nessah R., Larbani M., (2004), *On Berge equilibrium*. The 35-th Conference of the Italian Association of Operation Research (AIRO 2004), Lecce, Italy
- Nessah R., Larbani M., (2003), *g-Maximum equality* Abstracts of the Third Conference on Nonlinear Analysis and Convex Analysis (NACA 2003), Tokyo, Japan
- Nessah R., Yalaoui F., Chu C., (2003), *La minimisation du temps de séjours des tâches ordonnancées sur des machines parallèles identiques : Nouvelle borne inférieure*. Conférence Internationale Productique CIP'03, Alger, Algeria
- Nessah R., Larbani M., (2002), *About Berge strong equilibrium* The International Congress of Mathematicians 2002 (ICM 2002). Game Theory and Applications (Satellite Conference), Qingdao, China

### **National**

- Nessah R., Yalaoui F., Chu C., (2006), *Bornes inférieure et supérieure pour le problème  $Pm | ri | wiCi$*  6e Conférence Francophone de Modélisation et Simulation MOSIM'06, Rabat, Morocco
- Nessah R., Yalaoui F., Chu C., (2004), *Nouvelle borne inférieure pour le problème  $Pm | ri | Ci$*  5e Conférence Francophone de Modélisation et Simulation. (Modélisation et simulation pour l'analyse et l'optimization des systèmes industriels et logistiques) - MOSIM'04, Nantes, France

### **Other conference and seminar presentations**

---

### **International**

- Nessah R., Larbani M., (2007), *New Sufficient Conditions for the g-maximum Inequality* Fifth International Conference on Nonlinear Analysis and Convex Analysis (NACA 2007), Hsinchu, Taiwan

## **Non-refereed proceedings**

---

### **Published**

Larbani M., Nessah R., (2007), On a generalization of the Ky Fan's Inequality and its Application to Game Theory, in: W. Takahashi, T. Tanaka(Eds.) in *4th International conference on Nonlinear Analysis and Convex Analysis (NACA 2005)*, Yokohama Publishers, Yokohama, pp. 305-314

Nessah R., Larbani M., (2007), New Sufficient Conditions for the g-maximum Inequality, in: Wataru Takahashi, Tamaki Tanaka(Eds.) in *Fifth International Conference on Nonlinear Analysis and Convex Analysis (NACA 2007)*, Yokohama Publishers, Yokohama

## **Books**

---

### **Published**

Tazdait T., Nessah R., (2013), *Le paradoxe du vote*, 978-2-7132-2406-5, Éditions EHESS, Paris, 232 pages

Tazdait T., Nessah R., (2008), *Les théories du choix révolutionnaire*, 978-2-7071-5400-2, Éditions La Découverte, Paris, 119 pages

## **Chapters in books**

---

### **Published**

Nessah R., Tazdait T., Larbani M., (2012), Strong Berge equilibrium and strong Nash equilibrium: Their relation and existence , in: Petrosjan, L.A., Mazalov, V.V.(Eds.), *Game Theory and Applications* , 978-1-61470-187-3, Nova Science Publishers, New York, NY, chapter 12, pp. 165-180

Nessah R., Larbani M., Tazdait T., (2009), New Sufficient Conditions for the g-maximum Inequality , in: Takahashi, W., Tanaka, T.(Eds.), *Nonlinear Analysis and Convex Analysis* , Yokohama Publishers, Yokohama, pp. 151-160

Larbani M., Nessah R., (2007), On a generalization of the Ky Fan's Inequality and its Application to Game Theory, in: Takahashi, W., Tanaka, T.(Eds.), *Nonlinear Analysis and Convex Analysis*, 978-4946552274, Yokohama Publishers, Yokohama, pp. 305-314

Nessah R., Larbani M., (2003), g-maximum equality, in: Wataru Takahashi, Tamaki Tanaka(Eds.), *Nonlinear Analysis and Convex Analysis*, 4-946552-15-4 , Yokohama Publishers, Yokohama

Nessah R., Larbani M., (2002), About the Berge Strong Equilibrium, in: Hongwei Gao et al.(Eds.), *Game Theory and Applications*, Qingdao Publishing House, Qingdao, pp. 387-389

## **Working papers**

---

Nessah R., (2013), *Weakly Continuous Security in Discontinuous and Nonquasiconcave Games: Existence and Characterization*, IESEG Working Paper Series 2013-ECO-20, IESEG School of Management

Nessah R., Tazdait T., (2010), *Absolute Optimal Solution For a Compact and Convex Game*, IESEG Working Paper Series 2010-ECO-07, IESEG School of Management

Nessah R., Kacem I., (2010), *Branch-and-bound method for minimizing the weighted completion time scheduling problem on a single machine with release dates*, IESEG Working Paper Series 2010-ECO-08, IESEG School of Management

Nessah R., Tazdait T., Larbani M., (2010), *Existence of two Strong Equilibria and their Relation*, IESEG Working Paper Series 2010-ECO-09, IESEG School of Management

Nessah R., Tian G., (2010), *Existence of Equilibrium in Minimax Inequalities, Saddle, Points, Fixed Points, and Games without Convexity Sets*, IESEG Working Paper Series 2010-ECO-10, IESEG

Nessah R., Tian G., (2010), *Existence of Equilibrium in Discontinuous Games*, IESEG Working Paper Series 2010-ECO-11, IESEG

Nessah R., Tian G., (2010), *On the Existence of Strong Nash Equilibria*, IESEG Working Paper Series 2010-ECO-12

Nessah R., Tazdait T., (2010), *Quasicontinuity and Nash Equilibrium in Compact and Convex Games*, IESEG Working Paper Series 2010-ECO-13, IESEG School of Management

Nessah R., Chu C., (2010), *A Lower Bound for Weighted Completion Time Variance*, IESEG Working Paper Series 2010-ECO-14, IESEG School of Management

Nessah R., (2010), *Existence of Equilibria with Non-Ordered Preference Relations*, IESEG Working Paper Series 2010-ECO-15, IESEG School of Management

Nessah R., Larbani M., Tazdait T., (2010), *On Berge Equilibria*, IESEG Working Paper Series 2010-ECO-16, IESEG School of Management

Nessah R., Tian G., (2009), *On the Existence of Strong Nash Equilibria*, IESEG Working Paper Series 2009-ECO-06, LEM Working Paper 2009-07, IESEG School of Management

Nessah R., Kerstens K., (2008), *Characterizations of the Existence of Nash Equilibria with Non-convex Strategy Sets*, IESEG Working Paper Series 2008-ECO-13, LEM Working Paper 2008-19, IESEG School of Management

Nessah R., Tian G., (2008), *The Existence of Equilibria in Discontinuous and Nonconvex Games*, IESEG Working Paper Series 2008-ECO-14, LEM Working Paper 2008-17, IESEG School of Management

Nessah R., Tian G., (2008), *Existence of Equilibrium in Minimax Inequalities, Saddle Points, Fixed Points, and Games without Convexity Sets*, IESEG Working Paper Series 2008-ECO-15, LEM Working Paper 2008-18, IESEG School of Management

Nessah R., Chu C., (2008), *A Lower Bound for the Weighted Completion Time Variance Problem*, IESEG Working Paper Series 2008-ECO-16, LEM Working Paper 2008-20, IESEG School of Management

## **EDITORIAL ACTIVITY**

---

### **Member of the editorial board of an academic journal**

**2014** International Journal of Games, USA

## **INSTITUTIONAL SERVICE**

---

### **Participation in recruitment of professors**

ECONOMICS Recruitment, IÉSEG School of Management, France

ECONOMICS Recruitment, IÉSEG School of Management, France

ECONOMICS Recruitment, IÉSEG School of Management, France