



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

PROFESSIONAL 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 (bachelor cycle)
- Le controle qualite : methodes et interpretations, Grande ecole (bachelor cycle)
- Planification et ordonnancement de la production, Grande ecole (bachelor cycle)
- Méthodes d'optimisation non linéaire et applications
- Planification et ordonnancement de la production

INTELLECTUAL CONTRIBUTIONS

Papers in refereed journals

Published

- Nasini S., Nessah R., (2023), Time-flexible min completion time variance in a single machine by quadratic programming, *European Journal of Operational Research*, 312(2), pp. 427-444
- Nessah R., Crettez B., Tazdait T., (2023), On the strong β -hybrid solution of an N-person game, *Theory and Decision*, 94(3), pp. 363-377
- Crettez B., Nessah R., Tazdait T., (2022), On the strong hybrid solution of an n-person game, *Mathematical Social Sciences*, 117(1), pp. 61-68
- Nasini S., Nessah R., (2022), A multi-machine scheduling solution for homogeneous processing: Asymptotic approximation and applications, *International Journal of Production Economics*, 251(2022), pp. 108555
- Nessah R., (2022), Weakly Continuous Security and Nash Equilibrium, *Theory and Decision*, 93(4), pp. 725-745
- Nasini S., Nessah R., (2021), An Almost Exact Solution to the Min Completion Time Variance in a Single Machine, *European Journal of Operational Research*, 294(2), pp. 427-441
- Nessah R., (2021), Technical Note - Alternative Theorem: Equilibrium in Abstract Economies, *International Game Theory Review*, 22(4), pp. 2071001
- Nessah R., Tazdait T., Vahabi M., (2021), The game is afoot: The French reaction to game theory in the fifties, *History of Political Economy*, 53(2), pp. 243-278
- Crettez B., Nessah R., (2020), On the Existence of Unilateral Support Equilibrium, *Mathematical Social Sciences*, 105(2020), pp. 41-47
- Nessah R., (2019), A Note on Discontinuous Games: Single Lower-Deviation Property, *Revue d'Economie Politique*, 129(3), pp. 419-429
- Nessah R., Tazdait T., (2019), Quasi-Transfer Continuity and Nash Equilibrium, *International Game Theory Review*, 21(4), pp. 1950004
- 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., Tazdait T., (2015), How to Play Games? Nash Versus Berge Behavior Rules, *Economics and Philosophy*, 31(1), pp. 123-139
- Nessah R., Larbani M., Tazdait 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 $Pm \mid sds, ri \mid Ci$ 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., Tazdait 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., Tazdait 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., Tazdait 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 $1 \mid ri \mid wiCi$ 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 $Pm \mid ri \mid Ci$* 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 $P_m | r_i | w_i C_i$* 6e Conférence Francophone de Modélisation et Simulation MOSIM'06, Rabat, Morocco

Nessah R., Yalaoui F., Chu C., (2004), *Nouvelle borne inférieure pour le problème $P_m | r_i | C_i$* 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

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

Tazdaït 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

RESEARCH ACTIVITIES

COMMITTEE CHAIR

ECONOMICS Recruitment, IÉSEG School of Management, France

ECONOMICS Recruitment, IÉSEG School of Management, France

ECONOMICS Recruitment, IÉSEG School of Management, France