



Symposium on Industrial Organization and Game Theory

Fernanda A. Ferreira and Flávio Ferreira

Citation: [AIP Conference Proceedings](#) **1168**, 969 (2009); doi: 10.1063/1.3241647

View online: <http://dx.doi.org/10.1063/1.3241647>

View Table of Contents: <http://scitation.aip.org/content/aip/proceeding/aipcp/1168?ver=pdfcov>

Published by the [AIP Publishing](#)

Articles you may be interested in

[Symposium on Industrial Organization and Game Theory](#)

AIP Conf. Proc. **1281**, 798 (2010); 10.1063/1.3498604

[Investment under Uncertainty with ManagerShareholder Conflict](#)

AIP Conf. Proc. **1168**, 961 (2009); 10.1063/1.3241645

[A Note on Local Stability Conditions for Two Types of Monetary Models with Recursive Utility](#)

AIP Conf. Proc. **1168**, 953 (2009); 10.1063/1.3241643

[Some Extensions of Discrete Fixed Point Theorems and Their Applications to the Game Theory](#)

AIP Conf. Proc. **1168**, 941 (2009); 10.1063/1.3241640

[Multiple Positive Solutions in the Second Order Autonomous Nonlinear Boundary Value Problems](#)

AIP Conf. Proc. **1168**, 873 (2009); 10.1063/1.3241618

Symposium on Industrial Organization and Game Theory

Fernanda A. Ferreira and Flávio Ferreira

*ESEIG, Instituto Politécnico do Porto
Rua D. Sancho I, 981, 4480-876 Vila do Conde, Portugal.
E-Mail: {fernandaamelia, flavioferreira}@eu.ipp.pt*

INTRODUCTION

Industrial Organization is the field of economics that studies the behaviour of firms and the structure of markets when markets fail to be perfectly competitive. Game Theory is a branch of mathematical analysis developed to study decision making in conflict situations. Such a situation exists when two or more decision makers who have different objectives act on the same system or share the same resources. Game theory has become the standard language of Industrial Organization: the industrial organization theory literature is now presented almost exclusively in terms of game theoretic models. Game Theory is a mathematical tool used to analyze the behaviour of firms and its impact on market structure, pricing and profits.

The aim of the symposium on Industrial Organization and Game Theory, at the International Conference of Numerical Analysis and Applied Mathematics 2009 (ICNAAM 2009), is to bring together researchers with different backgrounds and interests in all aspects of Game Theory, its applications in Industrial Organization, and its practice, in order to further communication, collaboration, and exchange of new ideas. The topics include, but are not limited to the following: Game Theory and Management, dynamic games, stochastic games, network games, bargaining, coalition formation, cooperative games, differential games, learning, non-cooperative games, oligopoly games, voting and power indices; applications of games in fields such as strategic management, marketing, operations management, public management, financial management, human resource, energy and resource management, and, in particular, industrial organization that investigates the outcomes of market structures in environments with prices or quantity competition, demand and costs uncertainty, product differentiation, R&D and innovation, international trade policies, and others.

ORGANIZERS

Fernanda A. Ferreira



Fernanda A. Ferreira is Adjunct Professor of Mathematics at School of Management and Industrial Studies, Porto Polytechnic Institute (Portugal), and is a member of the Mathematical research center at the University of Porto, CMUP (Portugal). She got her PhD at University of Porto in 2007, with a thesis entitled "Applications of Mathematics to Industrial Organization", under the supervision of Alberto A. Pinto. Her research interests are in Game Theory and

its applications in Industrial Organization. She is the author or co-author of more than 50 journal papers and conference proceedings. She has given talks in major international conferences, mainly on Mathematics and its applications in Engineering and Economics.

Flávio Ferreira



Flávio Ferreira is Coordinator Professor of Mathematics at School of Management and Industrial Studies, Porto Polytechnic Institute (Portugal), and is a member of the Mathematical research center at the University of Porto, CMUP (Portugal). He is the head of Mathematics Department of School of Management and Industrial Studies, Porto Polytechnic Institute. He got his PhD in Applied Mathematics, at University of Porto, in 2000, under the supervision of Alberto A. Pinto. His research interests are in Dynamical Systems and in Game Theory and its applications in Industrial Organization. He is co-author of a book published by Springer-Verlag, and co-author of more than 40 journal papers and conference proceedings.