

CONTACT INFORMATION

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PERSONAL

Born June 21, 1975.
Italian citizen, fluent in English and Spanish.

CURRENT POSITION

Universitat Jaume I Castellón, Spain
Associate Professor (Profesor Titular)

PREVIOUS POSITIONS

Universitat Jaume I Castellón, Spain
Lecturer (Profesor Contratado Doctor) Feb. 2009–Oct. 2010

Christian-Albrechts-Universität Kiel, Germany
Juniorprofessor of Economics Nov. 2005–Dec. 2008

Christian-Albrechts-Universität Kiel, Germany
Assistant professor of Economics June–Oct. 2005

INFN Istituto Nazionale di Fisica della Materia Cagliari, Italy
Research assistant March–Oct. 2000

EDUCATION

Christian-Albrechts-Universität Kiel, Germany
Research assistant March–Oct. 2000
Ph.D. in Economics, 2006

Università degli Studi di Cagliari Cagliari, Italy
Research assistant March–Oct. 2000
Degree in Theoretical Physics, 1999

RESEARCH INTERESTS

Industrial dynamics, agent-based economics, statistical equilibrium, complex economic networks, experimental economics

AWARDS AND FELLOWSHIPS

Post-Lauream Scholarship, Regione Autonoma della Sardegna, Italy, 2001-2004.
Prize for the best Ph.D. thesis in Economics, University of Kiel, 2006.
Prize for the best Ph.D. thesis in the Faculty of Social Sciences, University of Kiel, 2006.

GRANTS AND PROJECTS

European Union Euro 1,5 M
Complex Markets, Sixth Framework Programme Strep: Nest Pathfinder-Complexity, 2005-2009.
Director of the project Prof. Mark Salmon (Business School, University of Warwick).

Volkswagen Foundation Euro 310,000
Complex Networks As Interdisciplinary Phenomena, 2008-2010, with M. Milaković, A. Irle, T. Lux, and F. Wagner. Director of the project Prof. Thomas Lux (University of Kiel and Institute for the World Economy)

Ministerio de Ciencia y Tecnología, Euro 65,000
Spanish Government
Política Ambiental y Comportamiento Estratégico de las Empresas: Teoría, Experimentos y Simulación, 2009-2011. Director of the project Carmen Arguedas (Universidad Autónoma de Madrid).

Bancaixa Foundation Euro 27,000
Universitat Jaume I
Análisis del Mercado de Derechos de Emisión de CO₂: Un Enfoque Experimental y Computacional, 2010-2012. Director of the project Eva Camacho-Cuena (Universitat Jaume I).

Istituto Valenciano Euro 4,000
de Investigaciones Economicas
The Role of Public and Private Information in a Minimal laboratory financial Market, 2010, with Andrea Morone. Director of the project Simone Alfarano (Universitat Jaume I).

CONFERENCE ORGANIZATION

8th **Artificial Economics**, September 2012 in Castellón, head of the local committee
4th **Econophysics Colloquium**, August 2008 in Kiel, local organizer
Workshop on Bubbles, Herding and Crashes, October 2005 in Kiel, local organizer
8th **WEHIA** Meeting, May 2003 in Kiel/Germany, local organizer

MEMBERSHIP IN SCIENTIFIC & PROGRAM COMMITTEES

2nd **MAFIN**: Managing Financial Instability in capitalistic Economies, September 2010 in Reykjavik/Iceland
15th **ESHIA/WEHIA**, June 2010 in Alessandria/Italy
Member of the Management Committee of the COST Action IS0902: “Systemic Risks, Financial Crises and Credit”, 2009-2013.

REFEREE FOR

Advance in Complex Systems, Applied Financial Mathematics, Computational Economics, European Journal of Finance, European Physical Journal B, Journal of Economic Behavior and Organization, Journal of Economic Dynamics and Control, Journal of Economic Interaction and

Coordination, Journal of Economics and Statistics, Journal of Macroeconomics, Physica A, Quantitative Finance, Studies of Nonlinear Dynamics and Econometrics, Theory and Decision. Referee of research proposals for the Netherlands Organization for Scientific Research and the European Science Foundation.

EDITORIAL ACTIVITY

Topical section: Interdisciplinary Applications of Physics in Economics and Finance, *European Physical Journal B*, 73(1), January 2010.

TEACHING

Christian-Albrechts-Universität, Kiel

Mathematical Methods: Dynamical Systems and Dynamical Optimization (Lecture and Seminar, graduate/advanced undergraduate level): WS 05

Agent-Based Models in Economics and Finance (Lecture and Seminar, graduate/advanced undergraduate level): SS 06

Optimization Problems and Stochastic Methods (Lecture, graduate/advanced undergraduate level): SS 2007

Distributional regularities in financial and economic systems (Seminar, graduate/advanced undergraduate level): SS 2008

Pricing in Derivative Markets (Lecture, graduate/advanced undergraduate level): SS 2008

Mathematics for Economics (Lecture, graduate/advanced undergraduate level, PhD program): WS 2003-2008

Universitat Jaume I, Castellón

Introduction to Macroeconomics I, since SS 2009 (undergraduate level)

Introduction to Macroeconomics II, since SS 2009 (undergraduate level)

International Finance, since SS 2009 (Master Program)

Dynamical Systems in Economics, SS 2009 (Master Program)

PUBLICATIONS (*journal articles*)

“Firm profitability and the network of organizational capabilities”, with F. Wagner and M. Milaković, *Physica A*, 389(21), pp. 4769-4775, 2010.

“The small core of the German corporate board network”, with M. Milaković and T. Lux, *Computational and Mathematical Organization Theory*, 16(2), pp. 201-215, 2010.

“What distinguishes individual stocks from the index?” with F. Wagner and M. Milaković, *European Physical Journal B*, 73(1), pp. 23-28, 2010.

“Interdisciplinary Applications of Physics in Economics and Finance”, with M. Milaković and T. Lux, *European Physical Journal B*, 73(1), pp. 1-2, 2010.

“Network structure and N-dependence in agent-based herding models”, with M. Milaković, *Journal of Economic Dynamics and Control*, 33(1), pp. 78-92, 2009.

“Does classical competition explain the statistical features of firm growth?” with M. Milaković, *Economics Letters*, 101(3), pp. 272-274, 2008.

“A nonparametric approach to the noise density in stochastic volatility models”, with M. Milaković and F. Wagner, *Applied Financial Economics Letters*, 4(5), pp. 311-314, 2008.

“Time-Variation of Higher Moments in a Financial Market with Heterogeneous Agents: An Analytical Approach”, with T. Lux and F. Wagner, *Journal of Economic Dynamics and Control*, 32(1), pp. 101-136, 2008.

“A Noise Traders Model as a Generator of Apparent Financial Power Laws and Long Memory”, with T. Lux, *Macroeconomics Dynamics*, 11, pp. 80-101, 2007.

“Empirical Validation of Stochastic Models of Interacting Agents: A ‘Maximally Skewed Noise Trader Model’”, with T. Lux and F. Wagner, *European Physical Journal B*, 55(2), pp. 183-187, 2007.

“Mercados Financieros en el Laboratorio en presencia de informacin Heterognea e Imperfecta”, with I. Barreda-Tarrazona and E. Camacho-Cuena, *Cuadernos Aragoneses de Economa*, 17(2), pp. 275-298, 2007.

“On the Role of Heterogeneous and Imperfect Information in a Laboratory Financial Market”, with I. Barreda-Tarrazona and E. Camacho-Cuena, *Central European Journal of Operation Research*, 14(4), pp. 417-433, 2006.

“Estimation of a Simple Agent-Based Model of Financial Markets: An Application to Australian Stock and Foreign Exchange Data”, with T. Lux and F. Wagner, *Physica A*, 370(1), pp. 38-42, 2006.

“Estimation of Agent-based Models: The case of Asymmetric Herding Model”, with T. Lux and F. Wagner, *Computational Economics*, 26, pp. 19-49, 2005.

BOOK CONTRIBUTIONS (*edited volumes, proceedings, special issues, etc.*)

“Estimation of a simple genetic algorithm applied to a laboratory experiment” with E. Camacho and J. Domènech, *Combining Soft Computing and Statistical Methods in Data Analysis*, edited by C. Borgelt, G.G. Rodríguez, W. Trutschnig, M.A. Lubiano, M.A. Gil, P. Grzegorzewski, O. Hryniewicz, Springer, 23-31, 2010.

“Heterogeneous and Imperfect Information in an Experimental Asset Market”, with I. Barreda and E. Camacho, *Bounded Rationality in Economics and Finance*, edited by C. Richter, LIT Verlag, 39-56, 2007.

“A Minimal Noise Traders Model with Realistic Time Series Properties”, with T. Lux, in *Long*

Memory in Economics, edited by G. Teyssière and A. P. Kirman, Springer, pp. 345-361, 2007.

“Excess Volatility and Herding in an Artificial Financial Market: Analytical Approach and Estimation”, with T. Lux and F. Wagner, *Funktionsfähigkeit und Stabilität von Finanzmärkten*, edited by W. Franz, H. J. Ramser and M. Stadler, Mohr Siebeck, Tübingen, pp. 241-254, 2005.

COMPLETED PAPERS

“A statistical equilibrium model of competitive firms,” with M. Milaković, A. Irle and J. Kauschke, working paper university of Kiel (revised and submitted in *Journal of Economics Dynamics and Control*).

“The impact of herding and network hierarchy on financial volatility,” with M. Raddant and M. Milaković, working paper University of Kiel (submitted).

“Identification of Interaction Effects in Survey Expectations: A Cautionary Note”, with M. Milaković, working paper University of Bamberg (submitted).

“The role of public and private information in a laboratory financial market”, working paper IVIE, with E. Camacho and A. Morone, (submitted).

“Extreme Value Theory as a Theoretical Background for Power Law Behavior”, with Thomas Lux, working paper University of Kiel (submitted).

“The fine structure of spectral properties for random correlation matrices: an application to financial markets”, with G. Livan and E. Scalas, working paper University of Castellón (submitted).