# **FABRIZIO GERMANO** – curriculum vitae 06/2020

Universitat Pompeu Fabra

Department of Economics and Business

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#### Personal

Italian citizen, married with two children (born in 2007 and 2009)

## **EDUCATION**

Ph.D. Economics, University of California San Diego, 1996

M.A. Economics, University of California San Diego, 1993

B.A. Economics, (Diplom Volkswirtschaftslehre), Universität Hamburg 1990

#### EMPLOYMENT

Universitat Pompeu Fabra, 2001–present (currently: Associate Professor)

Tel Aviv University, 1999-2001

Université Catholique de Louvain, 1997-1999

Université de Lausanne, 1996-1997

#### Research Fields

Microeconomics, Game Theory, Bounded Rationality

Media Economics, Digital Economics, Strategic Communication

Inequality, Institutions, Cooperation, Learning and Evolution

#### **Publications**

## Refereed Articles

Opinion Dynamics via Search Engines (and Other Algorithmic Gatekeepers), *Journal of Public Economics*, July, 2020, in press, with Francesco Sobbrio

Time Scarcity and the Market for News, *Journal of Economic Behavior & Organization*, 174, 173-195, 2020, with Larbi Alaoui

Uncertain Rationality, Depth of Reasoning and Robustness in Games with Incomplete Information, *Theoretical Economics*, 15(1), 89-122, 2020, with Jonathan Weinstein and Peio Zuazo-Garin.

The Few-Get-Richer: A Surprising Consequence of Popularity-Based Rankings?, WWW'19, *The World Wide Web Conference*, 2764-2770, May 2019, with Vicenç Gómez and Gaël Le Mens

Bounded Rationality and Correlated Equilibria, *International Journal of Game Theory*, 46(3), 595-629, 2107, with Peio Zuazo-Garin

Concentration and Self-Censorship in Commercial Media, *Journal of Public Economics*, 97, 117-130, 2013, with Martin Meier

What Do the Papers Sell? A Model of Advertising and Media Bias, *Economic Journal*, 119, 680-704, 2009, with Matthew Ellman

Global Nash Convergence of Foster and Young's Regret Testing, *Games and Economic Behavior*, 60, 135-154, 2007, with Gábor Lugosi

Stochastic Evolution of Rules for Playing Finite Normal Form Games, *Theory and Decision*, 62, 311-333, 2007.

Existence of Sparsely Supported Correlated Equilibria, *Economic Theory*, 32, 575-578, 2007, with Gábor Lugosi

On Some Geometry and Equivalence Classes of Normal Form Games, *International Journal of Game Theory*, 34, 561-581, 2006

Ascending Auctions for Multiple Objects: The Case for the Japanese Design, *Economic Theory*, 28, 331-355, 2006 with Gian Luigi Albano and Stefano Lovo

Retaliatory Equilibria in a Japanese Ascending Auction for Multiple Objects, *Review of Economic Design*, 10, 1-8, 2006, with Gian Luigi Albano and Stefano Lovo

Bertrand-Edgeworth Equilibria in Finite Exchange Economies, *Journal of Mathematical Economics*, 39, 677-692, 2003

On (Un)Knots and Dynamics in Games, *Games and Economic Behavior*, 41, 46-60, 2002, with Stefano Demichelis

A Comparison of Standard Multi-Unit Auctions with Synergies, *Economics Letters*, 71, 55-60, 2001, with Gian Luigi Albano and Stefano Lovo

On the Indices of Zeros of Nash Fields, *Journal of Economic Theory*, 94, 192-217, 2000, with Stefano Demichelis

Some Consequences of the Unknottedness of the Walras Correspondence, *Journal of Mathematical Economics*, 34, 537-545, 2000, with Stefano Demichelis

## Other Writings

Media Failures and Media Markets, Els Opuscles del CREI, No. 43, January 2017

Biaixos Informatius I Mercats dels Mitjans de Comunicació, Els Opuscles del CREI, No. 43, January 2017

Regulating for an Independent Media: The Problems of Political and Commercial Bias, *VoxEU*, September 2009, with Matthew Ellman

On Boundedly Rational Rules for Playing Normal Form Games, in R. Topol and B. Walliser (eds.) *Cognitive Economics: New Trends, Contributions to Economic Analysis*, Elsevier, 2006

## Working Papers

Higher Orders of Rationality and the Structure of Games, UPF WP 1672, 2019, Francesco Cerigioni, Pedro Rey-Biel, and Peio Zuazo-Garin

Approximate Knowledge of Rationality and Correlated Equilibria, UPF WP 1326, 2012; (also Center for the Study of Rationality DP 610, Hebrew University, Jerusalem, 2012)

Quotient Spaces of Boundedly Rational Types, UPF WP 1287, 2011 (revised 2012), with Davide Cianciaruso (also CEM-EMS DP 1539, Kellogg, Northwestern University)

On Commercial Media Bias, UPF WP 1133, 2008

On Some Collusive and Signaling Equilibria in Ascending Auctions for Multiple Objects, UCL/ELSE WP 2002, with Gian Luigi Albano and Stefano Lovo

On the Indices of Zeros of Nash Fields: Extensions and Applications, CORE DP 2000/17, 2000, with Stefano Demichelis

On Nash Equivalence Classes of Generic Normal Form Games, CORE DP 9833, 1998

## Work in Progress

Cooperation and Inequality: A Macro-Evolutionary Perspective, 2020, with Lloyd Demetrius

Advertising and Suspense Potential, with Larbi Alaoui

Limitations of Personalized and Popularity-Based Ranking Algorithms, with Gaël Le Mens

An Experimental Examination of the E-Mail Game, with Francesco Cerigioni and Pedro Rey Biel

Dynamic Information Aggregation with Strategic Experts: A Heuristic Approach, with Nicoló Cesa-Bianchi and Yishay Mansour

#### RESEARCH GRANTS

Spanish Ministry of Science and Innovation Grant ECO2017-89240-P (AEI/FEDER, UE) *Incentives, Information and Institutions: Theory and Applications*, Project heads: Juan-José Ganuza and Fabrizio Germano, 2017-2020

Fundación BBVA Grant Innocavión e Información en la Economía Digital, Project head: Matthew Ellman, 2016-2018

Spanish Ministry of Science and Innovation Grant ECO2014-59225-P Strategic Behavior and Social Welfare. Theory and Applications, Project heads: Juan-José Ganuza and Fabrizio Germano, 2015-2017

Spanish Ministry of Science and Innovation Grant ECO2011-28965 *Information, Markets and Social Decision Making. Theory and Applications*, Project head: Juan-José Ganuza Fernandez, 2012-2015

Spanish Ministry of Science and Technology Grant SEJ2007-64340 *Development and Inequality from the Local Approach to the International Perspective*, Project head: José Garcia-Montalvo, 2008-2012

Fundación Ramón Areces grant Medios de comunicación y mercados de información: como garantizar la calidad informativa y de contenido, Project head: Fabrizio Germano, 2006-2008

Fundación BBVA Grant Aprender a jugar, Project head: Sjaak Hurkens, 2005-2007

Spanish Ministry of Science and Technology and FEDER Grant BMF2003-03324 *Globalization: Regulation, Financial Integration and Foreign Aid,* Project head: José Garcia-Montalvo, 2005-2007

Spanish Ministry of Science and Technology Grant SEC2001-0792 Agglomeration, Productivity, and the New Economy, Project head: José Garcia-Montalvo, 2002-2004

European Commission, TMR Network Grant ERBFMRXCT0055 *Information and Cooperation*, Project head: Françoise Forges, 1996-2001

#### Awards and Fellowships

IMéRA Senior Residency Fellowship, IMéRA, Aix-Marseille Université, Marseille, 2015-2016
Fernand Braudel Senior Fellowship, European University Institute, Florence, 2014-2015
Salvador de Madariaga, Mobility Fellowship, Ministry of Education, Spain, 2009-2010
Visiting Fellowship, Institute for Advanced Studies, Hebrew University, Jerusalem, 2004-2005
Ramón y Cajal Fellowship, Ministry of Science and Technology, Spain, 2001-2006
Tel Aviv University Fellowship, Tel Aviv University, Israel, 1999-2001
TMR Network Fellowship, European Commission, 1999-2001
Marie Curie Fellowship, European Commission, 1998-1999
CORE Research Fellowship, CORE, Université Catholique de Louvain, 1997-1998
Academic Excellence Award, University of California, San Diego, 1993, 1994

#### Stays Abroad

IMéRA Residency, IMéRA, Aix-Marseille Université, Marseille, France, 2015-2016
Fernand Braudel Senior Fellow, European University Institute, Florence, Italy, 2014-2015
Visiting Scholar, Center for the Study of Rationality, Hebrew University, Jerusalem, Israel, 2012
Visiting Scholar, Kellogg School of Management, Northwestern University, USA, 2009-2010
Invited Fellow, Institute for Advanced Studies, Hebrew University, Jerusalem, Israel, 2004-2005
Visiting Scholar, Department of Economics, University of California, San Diego, USA, 2000

## Conferences and Seminars (since 2010)

2020

– **01/20:** UCSD Theory Foundations Conference, San Diego, USA – **01/20:** 2020 Allied Social Science Association Annual Meeting (ASSA 2020), San Diego, USA.

2019

- 11/19: Workshop on Climate Urbanism: From Climate Emergency Declarations to Indicators and Actions, Fundació Catalunya, Barcelona, Spain - 07/19: 5th International Conference on Computational Social Science (IC2S2), Amsterdam, The Netherlands: *The few-get richer: a surprising consequence of popularity-based rankings* - 07/19 International Conference in Economic Design and Algorithms, Saint Petersburg, Russia. *The few-get richer: a surprising consequence of popularity-based rankings* - 07/19 15th European Meeting on Game Theory (SING15), Turku, Finland: *Uncertain rationality, depth of reasoning and robustness in games with incomplete information* - 05/19: 2nd Catalan Economic Society Conference (CESC2), Barcelona, Spain: *Cooperation and inequality: a macro-evolutionary perspective* - 05/19: The World Wide Web Conference (WWW'19), San Francisco, USA: *The few-get richer: a surprising consequence of popularity-based rankings*.

#### 2018

- **12/18:** 1st Winter Workshop of the Catalan Economic Society, Barcelona, Spain. Discussant of: *Skewed information transmission* - **09/18:** 45th EARIE Annual Conference, Athens, Greece: *Opinion Dynamics via Search Engines* - **01/18:** 11th Digital Economics Conference, Toulouse School of Economics, Toulouse France: *Opinion Dynamics via Search Engines*.

#### 2017

- 12/17: 7th EIEF-UNIBO-IGIER Bocconi Workshop on Industrial Organization, Bologna, Italy: *Opinion Dynamics via Search Engines* - 07/17: XXXVII Chess Tournament, Open Internacional de Benasque, Benasque, Spain: *Game Theory and Bounded Rationality* - 07/17: Workshop on Quantum Information, Centro de Ciencias de Benasque Pedro Pascual, Benasque, Spain: *A Quick Overview of Game Theory and Bounded Rationality* - 06/17: Workshop on Law and Economics of Media and Telecommunications, TILEC, Tilburg University, Netherlands (invited contribution): *Opinion Dynamics via Search Engines* - 03/17: 9th Conference on Economics of Information and Communication Technologies, Ecole Polytechnique, TELECOM, ParisTech, France: *Opinion Dynamics via Search Engines* - 02/17: 2nd Workshop "Economics of Media Bias", Geneva, Switzerland: *Opinion Dynamics via Search Engines*.

#### 2016

- 09/16: XXXI Jornadas de Economía Industrial, Universitat de les Isles Balears, Palma de Mallorca, Spain: Opinion Dynamics via Search Engines - 08/16: EEA 2016, European Economic Association and Econometric Society European Meeting, Geneva, Switzerland: Bounded Rationality and Correlated Equilibria and - Opinion Dynamics via Search Engines - 07/12: GAMES 2016, World Congress of the Game Theory Society, Maastricht, The Netherlands: Uncertain Rationality, Depth of Reasoning and Robustness in Games with Incomplete Information - 03/16: Lunch Seminar in Economics, CREA, U Luxembourg, Luxembourg: On the Macroscopic Origins and Consequences of Economic Inequality - 02/16: Economic Theory Seminar, CORE, U Catholique de Louvain, Belgium: On the Macroscopic Origins and Consequences of Economic Inequality - 02/16: Economics Dept. Seminar, U Rovira i Virgili, Reus, Spain: On the Macroscopic Origins and Consequences of Economic Inequality.

#### 2015

- 12/15: AMSE-Greqam Interaction Workshop Seminar, Aix-Marseille School of Economics, Marseille, France: Bounded Rationality and Correlated Equilibria – 08/15: ESWC 2015, 11th World Congress of the Econometric Society, Montreal, Canada: On the Macroscopic Origins and Consequences of Economic Inequality – 07/15: 15th SAET Conference on Current Trends in Economics, Cambridge, United Kingdom: On the Macroscopic Origins and Consequences of Economic Inequality – 06/15: Workshop "Economics of Media Bias", Hamburg, Germany: Opinion Dynamics via Search Engines and Time Scarcity and the Market for News – 06/15: Barcelona GSE, Summer Forum, Barcelona, Spain: On the Macroscopic Origins and Consequences of Economic Inequality – 06/15: COEURE "Workshop Fiscal and Monetary Policy after the Crisis," EUI Florence, Italy – 04/15: Conference "The New Financial Architecture in the Eurozone," EUI Florence, Italy.

#### 2014

12/14: 4th EIEF-UNIBO-IGIER Bocconi Workshop on Industrial Organization, Bologna, Italy: *Time Scarcity and the Market for News* – 12/14: Research Seminar in Economics, European University Institute, Florence, Italy: *On the Macroscopic Origins and Consequences of Economic Inequality* – 12/14: Economics Department Research Seminar, University of Bologna, Bologna, Italy: *On the Macroscopic Origins and Consequences of Economic Inequality* – 12/14: Vienna Joint Economics Seminar, IAS and University of Vienna, Vienna, Austria: *On the Macroscopic Origins and Consequences of Economic Inequality* – 10/14: 12th Conference on Media Economics, Center for Studies in Economics and Finance, Naples, Italy: *Opinion Dynamics via Search Engines* – 09/14: AMSE-Greqam Seminar of Economics,

Aix-Marseille School of Economics, Marseille, France: On the Macroscopic Origins and Consequences of Economic Inequality – og/14: XXIX Jornadas de Economía Industrial, UPF, Barcelona: Time Scarcity and the Market for News (invited speaker) – o8/14: ESEM 2014, European Economic Association and Econometric Society European Meeting, Toulouse, France: On the Macroscopic Origins and Consequences of Economic Inequality – o8/14: EEA 2014, European Economic Association and Econometric Society European Meeting, Toulouse, France: Time Scarcity and the Market for News – o6/14: 13emes Journées LAGV, Aix-Marseille, France: On the Macroscopic Origins and Consequences of Economic Inequality – o6/14: 5th Symposium in Game Theory, University of York, United Kingdom: Bounded Rationality and Correlated Equilibria – o5/14: Economics Department Seminar, University of Copenhagen, Denmark: Time Scarcity and the Market for News – o4/14: CREI Macro-Lunch, UPF, Barcelona: On the Macroscopic Origins and Consequences of Economic Inequality: An Evolutionary Perspective.

#### 2013

12/13: Winter Workshops of the Barcelona GSE: Microeconomics: Time Scarcity and the Market for News – 12/13: Winter Workshops of the Barcelona GSE: Macroeconomics: On Resources and Inequality – 12/13: XXXVIII Simposio de la Asociación Española de Economía, 2013, Santander, Spain: Time Scarcity and the Market for News – 10/13: Information and Communication Technology Conference Munich, Ludwig Maximilian University, Munich, Germany: Time Scarcity and the Market for News – 05/13: Workshop on Law and Economics of Media and Telecommunications, TILEC, Tilburg University, Netherlands: Time Scarcity and the Market for News – 02/13: Barcelona Jocs Seminar, UPF/UAB/UB/IAE, Barcelona, Spain: Approximate Knowledge of Rationality and Correlated Equilibria

#### 2012

— 11/12: Internal Micro and Behavioral Economics Seminar, UPF, Barcelona, Spain: *Time Scarcity and the Market for News* – 09/12: 39th EARIE Annual Conference, Rome, Italy: *Time Scarcity and the Market for News* – 07/12: GAMES 2012, World Congress of the Game Theory Society, Istanbul, Turkey: *Approximate Knowledge of Rationality and Correlated Equilibria* – 07/12: North American Summer Meetings of the Econometric Society, Northwestern University, Chicago, USA: *Approximate Knowledge of Rationality and Correlated Equilibria* – 06/12: Paris Game Theory Seminar, Institut Henri Poncaré, Paris, France: *Approximate Knowledge of Rationality and Correlated Equilibria* – 06/12: Games and Strategy in Paris 2012, Conference in Honor of Sylvain Sorin's 60th Birthday, Institut Henri Poncaré, Paris, France – 05/12: FSR Scientific Seminar on "Communications and Media Markets: Emerging Trends and Policy Issues," Florence School of Regulation, EUI, Florence, Italy: *Time Scarcity and the Market for News* – 05/12: Game Theory Seminar, Center for the Study of Rationality, Hebrew University of Jerusalem, Israel: *Approximate Knowledge of Rationality and Correlated Equilibria* – 04/12: Paradigm Lost, Rethinking Economics + Politics, Institute of New Economic Thinking, Berlin, Germany

#### 2011

- 11/11: Internal Micro and Behavioral Economics Seminar, UPF, Barcelona, Spain: *Quotient Spaces of Boundedly Rational Types* - 10/11: 9th Workshop on Media Economics, Higher School of Economics, Moscow, Russia: *Time Scarcity and the Market for News* - 10/11: Economic Theory, Decision Theory Seminar, U Bocconi, Milano, Italy: *Dynamic Information Aggregation with Strategic Experts: A Heuristic Approach* - 09/11: Games Toulouse 2011, U Toulouse, France: *Dynamic Information Aggregation with Strategic Experts: A Heuristic Approach* (invited speaker) - 07/11: 101st AEA Conference on "Media Studies & Communication," Porto University, Portugal: *Concentration and Self-Censorship in Commercial Media* - 06/11: 11th SAET Conference, Ancao, Portugal: *Concentration and Self-Censorship in Commercial Media* - 06/11: Workshop on Law and Economics of Media and Telecommunications, TILEC, Tilburg University, Netherlands: Discussant of *Ethical Voters and the Demand for News* - 05/11: Seminar in Economics, IMT Lucca, Italy: *Concentration and Self-Censorship in Commercial Media* - 05/11: Internal Micro and Behavioral Economics Seminar, UPF, Barcelona, Spain: *Dynamic Information Aggregation with Strategic Experts* - 03/11: Joint CES-LICOS Seminar, KU Leuven, Belgium: *Dynamic Information* 

Aggregation with Strategic Experts – **02/11:** Seminar in Economic Theory, U del Pais Vasco, Spain: *Dynamic Information Aggregation with Strategic Experts* 

#### 2010

- 12/10: Global Crisis: Rethinking Economy and Society, U Chicago, USA - 10/10: CMS-EMS Lunch Seminar, Kellogg, Northwestern U, USA: Concentration and Self-Censorship in Commercial Media - 10/10: Workshop on Media Economics and Public Policy, CUNY Hunter College, New York, USA: Discussant of Competing for Advertisers in Media Marketçs - 09/10: Workshop on Stochastic Methods in Game Theory, Erice, Italy: Dynamic Information Aggregation with Strategic Experts (invited speaker) - 07/10: 21st Stony Brook Game Theory Festival, SUNY Stony Brook, USA: Dynamic Information Aggregation with Strategic Experts - 03/10: Economic Theory Seminar, CORE, U Catholique de Louvain, Belgium: On Commercial Media Bias.

## **TEACHING**

## Graduate

Microeconomics, Game Theory, Decision Theory, General Equilibrium Theory, Information Economics, Communication and Games, Topics in Game Theory, Growth Theory, Media Economics

#### MBA

Business of Global Media, International Finance

## Undergraduate

Microeconomics, Game Theory, Macroeconomics, Growth Theory, International Economics, Social Choice, Information Economics, Real Analysis, Introduction to Game Theory, Introduction to Game Theory for Engineers

#### PhD Thesis Committee Member

Peio Zuazo-Garin, University of the Basque Country, Advisor: Elena Iñarra, 06/14 – Dries De Smet, KU Leuven, Advisor: Patrick Van Cayseele, 08/11 – Francesco Turino, UPF, Advisor: Jordi Galí, 11/10 – Zeynep Gurguc, UPF, Advisor: Rosemarie Nagel, 10/09 – Basak Gunes, UPF, Advisor: Rosemarie Nagel, 10/09 – Sandro Shelegia, UPF, Advisor: Antonio Cabrales, 06/09 – Antonia Rubi, UPF, Advisor: Antonio Cabrales, 11/07 – Peter Vida, Universitat Autonòma de Barcelona, Advisor: Antonio Calvo-Armengol, 08/06 – Oscar Nupia, UPF, Advisor: Antonio Cabrales, 06/06 – Rafael Lopez, UPF, Advisor: Fernando Vega-Redondo, 09/04 – Irene Martinez-Pardina, Universitat Autònoma de Barcelona, Advisor: Benny Moldovanu, 02/03 – Stefano Lovo, CORE, Université Catholique de Louvain, Advisor: Herakles Polemarchakis, 11/00

## Refereeing and Other Professional Activities

## Refereeing

Econometrica, American Economic Review, Journal of Political Economy, Review of Economic Studies, Theoretical Economics, Journal of the European Economic Association, Games and Economic Behavior, AEJ Microeconomics, Journal of Economic Theory, Mathematics of Operations Research, International Economic Review, Journal of Economic Dynamics and Control, Rand Journal of Economics, International Journal of Game Theory, Economic Theory, Journal of Mathematical Economics, Mathematical Social Sciences, Theory and Decision, Journal of Public Economics, Journal of Economics Management and Strategy, Journal of Economic Behavior & Organization, Journal of Industrial Economics, Economica, Economics Letters, Information and Economics Policy, Journal of Media Economics, Journal of Network Economics, Southern Economic Journal, Journal of Institutional and Theoretical Economics, Operations Research Letters, TOP, Adaptive Behavior, MIT Press (Book evaluation), Deutsche Forschungsgemeinschaft (German Research

Foundation), Spanish National Science Foundation (ANEP), Israeli National Science Foundation, Swiss National Science Foundation, etc.

#### Coordination and Other Activities

– Coordinator for UPF of Industrial Technologies and Economic Analysis (ITEA) joint degree with the Universitat Politècnica de Catalunya (2019/20) – Co-Organizer of the Barcelona JOCS Lecture Series, IAE-UAB-UB-UPF-BGSE (2015-2017) – Co-Organizer of the European Workshop on General Equilibrium Theory, UPF (in June 2009) – UPF Coordinator for the European Doctoral Program in Quantitative Economics, EDP (2002-2015) – Placement director for UPF/GPEFM (2007/08, 2009/10, 2012/13, and 2013/14) – Head of undergraduate microeconomics teaching at UPF (2010-2014) – Member of the Claustro of UPF (2006-2012) – Secretary of recruiting for UPF/Economics (2005/06) – Member of the Teaching Committee at UPF/Economics and Business (since 2004/05) – Organizer of the Jamboree of the European Doctoral Program in Quantitative Economics, EDP, at UPF (in 2003 and 2010)

## Languages

Italian (native), English (fluent), German (fluent), French (fluent), Spanish (fluent), Catalan (intermediate), Hebrew (basic)

#### Other

Erdös number: 4 (Germano-DeMichelis-Freedman-Lovász-Erdös and Germano-Lugosi-Beirlant-Deheuvels-Erdös)

Last updated: June 10, 2020