# MARIO ROBERTO GILLI

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# **CURRICULUM VITAE**

#### **BIOGRAPHICAL NOTES**

- Born on May 23<sup>rd</sup>, 1961, Milan (ITALY).
- □ Military service, 1985-1986.
- □ Married, one child.

#### **CURRENT POSITION**

- Professor of Economics, Department of Economics, University of Milano-Bicocca, since 2002.
- □ Adjunct Professor, Institute of Economics, Bocconi University, since 1998.
- □ Adjunct Professor, Faculty of Economics, Cattolica University, since 2009.
- Founder of Center for Interdisciplinary Studies in Economics, Psychology and Social Sciences, University of Milano-Bicocca <u>http://ciseps.unimib.it/</u>

#### **PAST POSITIONS**

- □ Assistant Professor of Economics, Bocconi University, 1992-1998.
- □ Associate Professor of Economics, Bari University, 1998-2001.
- □ Associate Professor of Economics, University of Milano-Bicocca, 2001-2002.

#### **EDUCATION**

- B.A. in Discipline Economiche e Sociali, Bocconi University, 1987.
- □ M.S. in Economics, Cambridge University, 1990.
- □ Ph.D. in Economics, Bocconi University, 1992.
- □ Ph.D. in Economics, Cambridge University, 1996.

#### FELLOWSHIPS AND AWARDS

- **Scholar Grant**, 1980-1985.
- Dissertation prize of Fondazione Luigi Einaudi, 1987.
- □ Research Fellowship, Assolombarda, 1987-1988.
- □ Research Fellowship, Bocconi University, 1989-1992.
- **Barch Brize, Bocconi University, 1996.**

### **FIELDS OF INTERESTS**

- Learning and evolutionary theories in Game Theory.
- Cross fertilizations among economics, psychology and social sciences.
- Analysis of organizations and institutions.
- Conflict theories with particular focus on suicide terrorism.
- Political Violence.
- Political Economics.

Mario Gilli is now working on four different research programs:

1. On the equilibrium concepts in games, in particular on using the sequence form to characterize equilibrium concepts such as Quasi Perfect Equilibria and Self Confirming Equilibria

2. Cross fertilizations between game theory and psychoanalysis, in particular on the analysis of the evolving knowledge in working teams, with applications to the relationship analyst - analysing and to the defensive attitudes of groups (Freud "Civilization and Its Discontents", "Totem and Taboo")

3. Conflict theories with different possible focus: general conflict models, terrorism both domestic and transnational, insurgency and manifestations within democracies and autocracies.

4. Political Economics with a particular attention to the analysis of organizations and institutions such as the European Union and the inner working of dictatorships and of democracies. Of particular interest is the joint effects of accountability and responsiveness on the performance of different polities and institutions

### REFEREEING

- Rivista Internazionale di Scienze Economiche e Commerciali
- Giornale degli Economisti
- Economia Politica
- Rivista Italiana degli Economisti
- Journal of Evolutionary Economics
- Bulletin of Economic Research
- Review of Economic Dynamics
- Economic Theory
- Journal of Economic Theory
- Games and Economic Behavior
- Journal of Economic Behavior and Organization
- Economic Journal
- International Review of Economics
- International Journal of Game Theory
- European Journal of Political Economy

# **PROGRAM COMMITTES**

- Summer School in Game Theory, course in Learning and Adaptive Behavior in Game Theory, 1993.
- □ XIII Italian Meeting on Game Theory and Applications, Bocconi University, 1997.
- □ International Conference on "The Paradoxes of Happiness in Economics", 2003.
- Cognitivism and Innovation in Economics, workshop with Prof. Brian Loasby, 2003.
- International Workshop in Honour of Daniel Kahneman "Interdisciplinary Approaches to Social Contexts, Interaction and Individual Behaviour", 2005
- □ Workshop on "Computational Knowledge meets Economic Analysis", 2005.
- □ International Conference on "Economic Theory and Experimental Economics", 2005.
- □ International Conference on "Reciprocity: Theories and Facts", 2007
- □ First Workshop on Game Theory, Bicocca, 2008
- International Workshop on "Experiments on Decision Making in Social Sciences", Bicocca, 2009
- □ International Workshop on "Game Theory and Applications", University of Milan, 2016
- Workshop on "Game Theory and Applications", Polytechnic University of Milan, 2017

- First International Conference on "The Political Economy of Democracy and Dictatorships", 2017
- Second International Conference on "The Political Economy of Democracy and Dictatorships", 2018
- Third International Conference on "The Political Economy of Democracy and Dictatorships", 2019
- □ First International Conference on European Studies, 2019
- Fourth International Conference on "The Political Economy of Democracy and Dictatorships", 2020
- Second International Conference on European Studies, 2020

### **ADMINISTRATIVE DUTIES**

- Director of Center for Interdisciplinary Studies in Economics Psychology and Social Sciences (CISEPS) from 2000 to 2008
- Scientific Committee of the Center for Interdisciplinary Studies in Economics Psychology and Social Sciences (CISEPS) from 2008
- Member of the Committee for Blended Elearning in Bicocca
- Member of the Committee for the modernization of the classrooms in Bicocca
- Scientific Committee of the Center for European Studies (CefES) since 2018
- □ President of the Balanced Committee Lecturers Students since 2007.

# **TEACHING PUBLICATIONS**

- □ Exercises and Solution in Advanced Microeconomics, EGEA: Milano, 1997.
- Lalian edition with integration of David Kreps "Microeconomia per Manager", Egea, 2005
- "Esercizi svolti di microeconomia per manager", Egea, 2006
- Italian edition with integration of Edgar K. Browning Mark A. Zupan "Microeconomia: Teoria e Applicazioni", Pearson, 2017.
- □ Mario Gilli "Esercizi di Microeconomia svolti", Pearson, 2018.

### PUBLICATIONS

- "Individualismo metodologico e comportamento strategico", Contributi per la discussione, Politeia, n.º20, 1989.
- "Correlated Rationalizability, Dominated Strategies, Refinements and Uniqueness", in Decision Processes in Economics, ed. Ricci, Springer-Verlag: Heidelberg, 1990.
- "Equilibrio e aspettative nei giochi in forma normale", *International Review of Economics and Business*, vol. 38, 4, 311-329, 1991.
- "Learning and Convergence to Equilibrium in Repeated Strategic Interactions: An Introductory Survey" (with P. Battigalli and C. Molinari), *Research In Economics*, XLVI, 3-4, 335-378, 1992.
- Sulla nozione di equilibrio nella teoria dei giochi, Cedam: Padova, 1995.
- "Equilibrio e soluzione nella teoria dei giochi: alcuni semplici risultati", Giornale degli Economisti, LV, 3, 369-389, 1996.
- "Approccio eduttivo e approccio evolutivo nella teoria dei giochi: una valutazione critica", *Rivista Internazionale di Scienze Sociali*, 2, 193-225, 1996.
- "Le nozioni di equilibrio e di soluzione nella teoria dei giochi", *Economia Politica*, XIII, 1, 113-142, 1996.
- "A Simple Extension of Dasgupta-Maskin Existence Theorem with an Application", *Bulletin of Economic Research*, 49, 19-27, 1997.

- "Disoccupazione Keynesiana e politica economica: considerazioni generali a partire da un semplice esempio di teoria dei giochi", *Rivista di Politica Economica*, 1997.
- "On Non-Nash Equilibria", *Games and Economic Behavior*, 27, 184-203, 1999.
- "Adaptive Learning in Imperfect Monitoring Games", *Review of Economic Dynamics*, 2, 472-485, 1999.
- "A General Approach to Rational Learning in Games", *Bulletin of Economic Research*, 2000.
- "I giochi e lo scambio: spunti per una discussione sull'uso delle aste nella politica economica", *Economia e Politica Industriale*, 2001.
- "Elementi per un confronto metodologico tra economia comportamentale ed economia neoclassica", *Rivista Italiana degli Economisti*, 2004.
- "Teoria economica e conoscenza computazionale", Sistemi & Impresa, 2006.
- "Reciprocity: Theory and Facts", with Bruni and Pelligra, International Review of Economics, 2008
- "Paura e Comportamento Economico", *Sviluppo&Organizzazione*, 2009.
- "Reputation: The Value Added by the Game Theoretic Point of View", in "Modelli e metodi per valutare la reputazione di strutture informative", ed. by Marisa Civardi, CLEUP, Padova, 2011.
- "Bargaining and Collusion in a Regulatory Model", with Fiocco R., in *"Recent Advances in the Analysis of Competition Policy and Regulation"* edited by Joe Harrington, Pierre Regibeau and Yannis Katsoulakos, Elgar, 2012.
- "Models of Protest and Repression in Autocracies. A Specific Point of View on the Arab Spring" in "Analyzing Global Environmental Issues. Theoretical and experimental applications and their policy implications" edited by Amnon Rapoport and Ariel Dinar, Routledge Publishers, New York, 2013.
- "Citizenry Accountability in Autocracies: The Political Economy of Good Governance in China" with Yuan Li, *Peace Economics, Peace Science and Public Policy*, 2012, 1-12.
- "A Model of Chinese Central Government: the Role of Reciprocal Accountability" with Yuan Li, Working Paper 223 of Economics Department, Bicocca University, *Economics* of *Transition*, July 2013.
- "A Simple Model of Protest and Repression in Autocracies Applied to the Arab Spring" CISEPS Research Paper n. 3, *International Game Theory Review*, Vol. 14, No. 4, 2012.
- "Citizenry Accountability in Autocracies: Rethinking the Success of Chinese Economic Reform" with Yuan Li, Working Paper del Dipartimento di Economia Politica, n. 240, 2012, now in Journal of Institutional and Theoretical Economics, vol. 170, N.4, 2014.
- "Accountability in Autocracies: The Role of Revolution Threat" with Yuan Li, CERC Stockholm School of Economics Working Paper 23, 2012 now published as "Coups, Revolutions and Efficient Policies in Autocracies" in *European Journal of Political Economy*, (2015), pp. 109-124 DOI information: 10.1016/j.ejpoleco.2015.04.01
- "Bargaining and Collusion in a Regulatory Relationship", with Fiocco R., in Journal of Economics, (2015)
- "Political Regimes and Government's Reaction to Terrorism", with N. Brugali and P. Buonanno, in *Peace Economics, Peace Science and Public Policy* (2017) **DOI:** 10.1515/peps-2017-0028.
- "Logrolling Under Fragmented Authoritarianism: Theory and Evidence from China" with Yuan Li and Jiwei Qian, University of Milan Bicocca Department of Economics, Management and Statistics Working Paper No. 333, 2017 now in *Public Choice*, 2018, vol. 174, Issues 364, p. 1-18, DOI <u>https://doi.org/10.1007/s11127-018-0526-4</u>, ISSN 0048-5829.

- "Democrazia e lutto dell'Uno. Fiducia, diversità, crisi della democrazia e dell'Unione Europea", forthcoming in "Amore e odio per l'Europa" a cura di Domenico Cosenza e Marco Focchi, Rosemberg & Sellier, 2019.
- "Selectorate's Information and Dictator's Accountability" with Yuan Li, in *Conflict Management and Peace Science*, December 2019, DOI: <u>10.1177/0738894219883994</u>.
- "A Characterization of Quasi-Perfect Equilibria" with Nicola Gatti and Alberto Marchesi, Games and Strategic Behavior, 2020, ISSN: 0899-8256.

# WORKING PAPERS

- "Learning Standards of Social Behaviour in a Stationary Society", *DAE Working Papers* (*Economic Theory*), University of Cambridge, n. 9610, 1996.
- "Learning by Playing", *Research Paper Series of the Faculty of Economics and Politics*, University of Cambridge, n. 53, 1996.
- "Uniform-Price Auctions: on the Optimality of an Elastic Supply" (with LiCalzi and Pavan), Working Paper of the Center of Mathematical Studies in Economics and Management Science, Northwestern University, 2001.
- "Rational Learning in Imperfect Monitoring Games", *Working Paper of Dipartimento di Economia Politica*, n. 46, 2002.
- "Iterated Admissibility as Solution Concepts in Game Theory", Working Paper del Dipartimento di Economia Politica, n. 47, 2002.
- □ Interdisciplinary Research in Social Sciences: Why and How, *Working Paper del* **CISEPS**, n. 3, 2005.
- "Bargaining and Collusion in a Regulatory Model", with Fiocco R., Working Paper del Dipartimento di Economia Politica, n. 207, 2010, revised and resubmit for Journal of Law, Economics and Organizations.
- "Reputation From a Game Theoretic Point of View", *Working Paper del Dipartimento di Economia Politica*, n. 217, 2010.
- "Accountability in One-party Government: Rethinking the Success of Chinese Economic Reform" with Yuan Li, *Working Paper del Dipartimento di Economia Politica*, n. 218, 2010.
- "A Simple Model of Protest and Repression in Autocracies to Interpret the Arab Spring" Working Paper del Dipartimento di Economia Politica, n. 228, 2011.
- Models of Protest and Repression in Autocracies. A Specific Point of View on the Arab Spring" Working Paper del Dipartimento di Economia Politica, n. 237, 2011.
- "Citizenry Accountability in Autocracies: The Political Economy of Good Governance in China" with Yuan Li, *Working Paper del Dipartimento di Economia Politica*, n. 240, 2012, now in *Journal of Institutional and Theoretical Economics*.
- "Accountability in Autocracies: The Role of Revolution Threat" with Yuan Li, CERC Stockholm School of Economics Working Paper 23.
- "Signalling Games and Accountability" with Yuan Li, working paper 2016, to be revised and submitted.
- "Efficient algorithms for the verification problem of Quasi Perfect and of Sequential equilibria", with Nicola Gatti and Fabio Panozzo, University of Milan Bicocca Department of Economics, Management and Statistics Working Paper No. 347, 2017 to be submitted to a Computer Science Journal
- "Transitions and Political Stability in Autocracies. The Role of Public Perception" with Yuan Li, 2017 submitted to Journal of Conflict Resolution
- "A New Approach to Contest Models" with Fausto Cavalli and Ahmad Naimzada Working Paper No. 364, 2017, now "Characterization of the set of equilibria in a class of contest models", submitted to Journal of Economic Theory

- "Political Regimes and the Determinants of Terrorism and Counter-terrorism", with Nicola Brugali and Paolo Buonanno, working paper 2017, to be submitted to Journal of Conflict Resolution
- "Italian terrorism and networks", with Nicola Brugali and Paolo Buonanno, working paper 2017, to be submitted
- "Populism and the Backlash against the Elites", with Elena Manzoni, working paper, 2017, to be submitted
- "The Enrollment of Patients in Clinical Trials from a Game Theory Perspective" with Roberto Lucchetti and Monica Savioli, 2019, to be submitted to International Journal of Public Health
- "Europe and Transnational Terrorism. A Strategic Analysis of Normative Spillovers" with Paolo Tedeschi, mimeo 2019, to be revised and submitted.

# WORK IN PROGRESS

- "A Note on Steady State Learning and Nash Equilibrium", mimeo, King's College, 1994.
- "Pricing as a Competitive and Learning Device", mimeo, King's College, 1995.
- "Using Rationalizability to Solve Oligopoly Models", mimeo, King's College, 1995.
- "Models of Strategic Interaction: a Case for Imperfect Monitoring Games", mimeo, Bocconi University, 1996.
- "A Case where Quantity Precommitment and Bertrand Competition Refine Cournot Outcomes", mimeo, Bocconi University, 1997.
- "A Simple Example of No Experimentation and No Learning", mimeo, Bocconi University, 1997.
- "The Dynamics of Information in Assets' Markets" (with R. Gatti), mimeo, Bari University, 1999.
- "I giochi e lo scambio: teoria delle aste e politica economica, draft of a book, mimeo, University of Milano-Bicocca, 2001.
- "Fertilizzazioni incrociate tra economia, psicologia e scienze sociali", plenary lecture at the XLIV Scientific Meeting of Società Italiana degli Economisti, 2003.
- "Explanations of Suicidal Terrorism, mimeo, University of Milano-Bicocca, 2003.
- "Aste per beni disponibili in quantità multipla: teoria e applicazioni", mimeo, University of Milano Bicocca, 2004.
- "Adaptive Learning by Similarities", mimeo, University of Milano-Bicocca, 2004.
- "Il terrorismo suicida: evidenza e teorie alternative secondo un approccio multidisciplinare", edited by Mario Gilli, forthcoming 2009.
- "Teoria dei giochi per manager e umanisti", forthcoming, Egea, 2009.
- "La logica del terrorismo suicida: riflessioni di un economista", forthcoming 2009.
- "The Strategic Logic of Suicide Terrorism", mimeo 2008.
- "L'introduzione di meccanismi di incentivazione nell'università italiana: un esempio di tecnologia a spizzico", mimeo 2008.
- "Pricing as a Learning and a Competitive Device", mimeo 1995 revised 2009.
- "Social Welfare and Diversity in Competitive Economies" with Gregorini F., mimeo 2015.
- "The Logic of Diversity", mimeo 2015
- "Revolution Cascades: an application to Arab Uprisings", mimeo 2016
- "Multidimensional policies in Autocracies", with Li Yuan, mimeo 2016
- "Comportamento razionale e razionalità cognitiva", mimeo 2017, progetto di libro divulgativo.
- "Revolution Cascades: Informational Herd or Learning Processes?", mimeo 2017
- "Theory and Evidence on the Causes and Effects of Domestic Terrorism", with Nicola Brugali and Paolo Buonanno, mimeo 2017.

- "The Successor Dilemma in Autocracies", with Li Yuan, Shu Yu and Yongjing Zhang, mimeo 2018
- "The Logic of Autocracies" with Li Yuan, project of a book for Cambridge University Press, mimeo 2018.
- "Spunti di riflessione dalla teoria dei giochi. Un'illustrazione per esempi, a partire da Lacan e il sofisma dei prigionieri", mimeo 2019, progetto di libro divulgativo.
- "Counter-terrorism and the Selection of Terrorists: the situation in Europe", with Paolo Tedeschi, mimeo 2019.
- "The European Union and its Governance Structure", with Elena Manzoni, mimeo 2019.
- "Machine Learning and Self-Confirming Equilibria", with Nicola Gatti and Alberto Marchesi, mimeo 2019

# **TEACHING MATERIALS**

- Esercitazioni di Politica Economica. Appunti ad uso degli studenti, Bocconi University, 1993.
- Learning Models in Game Theory, draft of a book, King's College, Cambridge, 1994.
- Economia dell'informazione e del comportamento strategico: lezioni ed esercizi svolti di teoria dei giochi, draft of a book, Bari University, 1999.
- □ Slides for Principle of Microeconomics, University of Milano-Bicocca
- □ Slides for Principle of Economics, Bocconi University
- □ Slides for *Microeconomics*, Bocconi University
- □ Slides for Political Economy, course B, University of Milano-Bicocca
- □ Slides for *Principle of Economics*, Academy of Finance
- □ Slides for Game Theory for Manager, University of Milano-Bicocca
- □ Slides for Information Economics for Manager, University of Milano-Bicocca
- Slides for Microeconomics II: Game Theory and Economics of Information for Master in Economics, Bocconi University
- □ Slides for Advanced Game Theory for DEFAP
- □ Slides for Incentives Theory for DEFAP
- □ Slides for Incentives and Political Economy for DEFAP
- □ Slides for Game Theory, University of Milano-Bicocca

#### PHD SUPERVISION

- 1. Filippo Gregorini 2004-2008
- 2. Raffaelle Fiocco 2005-2009
- 3. Shu Yang 2006-2010
- 4. Li Yuan 2007-2011

### **INVITED SEMINAR PRESENTATION**

- **2019:** University of Muenster
- **2018:** University of Hamburg
- **2017:** University of Bath; University of Milan
- **2016:** Duisburg University,
- **2015:** University of Amsterdam
- **2014:** University of Bari,
- **2013:** Polytechnic University of Milan
- **2012**: Freiburg University
- **2011:** Cambridge University
- **2010:** Bocconi University