Olivier Gossner

Born 04/04/1969

Qualifications

2004 Habilitation à diriger les recherches

1996 Ph.D. Thesis, *Université Paris 6*, *summa cum laude*1995 Agrégation de mathématiques

1989–1993 *Ecole Normale Supérieure*, Mathematics, Paris

Appointments

2008-	Professor, Department of Mathematics, London School of Economics
1998–	Professor and Senior CNRS Researcher, École polytechnique-CREST
2008–2014	Professor, Paris School of Economics
1996–1998	Fellow, CORE, Université Catholique de Louvain
1995–1996	Human Capital Mobility fellow, Universitat Pompeu Fabra

Publications

Articles in peer reviewed journals

"Double comptabilisation des frais de gestion sous Solvabilité II", with Michael Florig, *Revue Risques*, 2023

"Attention, please!", with Jakub Steiner and Colin Stewart, *Econometrica*, 89: 1717-1751, 2021

"High-sensitivity SARS-CoV-2 group testing by digital PCR among symptomatic patients in hospital settings", A. Martin, A. Storto, Q. Le Hingrat, G. Collin, B. André, A. Mallory, R. Dangla, D. Descamps, B. Visseaux, O. Gossner, *Journal of Clinical Virology*, 50, 2021

"Group Testing against Covid-19", with Christian Gollier, Covid Economics, 2:32-42, 2020

"Payoffs-Beliefs Duality and the Value of Information", with Michel de Lara, *SIAM Journal on Optimization*, 30:1, 464-489, 2020

"Preferences under ignorance", with Christoph Kuzmics, *International Economic Review*, 60:241-257, 2019

"On the Cost of Misperception: General Results and Behavioural Applications", with Jakub Steiner, *Journal of Economic Theory*, 177:816-847, 2018

"A normalized value for information purchases", with Antonio Cabrales and Roberto Serrano, *Journal of Economic Theory*, 170:266-288, 2017

"The complexity of interacting automata", with Penélope Hernández and Ron Peretz *International Journal of Game Theory*, 45:461-496, 2016

"Finite-sample exact tests for linear regressions with bounded dependent variables", with Karl Schlag, *Journal of Econometrics*, 177: 75-94, 2013

- "Entropy and the value of information to investors", with Antonio Cabrales and Roberto Serrano, *American Economic Review* 103: 360-377, 2013
- "Performing best when it matters most: evidence from professional tennis", with Julio Gonzalez-Dias and Brian Rogers, *Journal of Economic Behavior and Organizations* 84: 767-781, 2012
- "Reasoning-based introspection", with Elias Tsakas, *Theory and Decision* 73: 513-523, 2012
- "Impermanent types and permanent reputations", with Mehmet Ekmekci and Andrea Wilson, *Journal of Economic Theory* 147: 162–178, 2012
- "Simple bounds on the value of a reputation", *Econometrica* 79: 1627–1641, 2011
- "Ability and Knowledge", Games and Economic Behavior 69: 95–106, 2010
- "When is the individually rational payoff in a repeated game equal to the minmax payoff?", with Johannes Hörner, *Journal of Economic Theory* 145: 63-84, 2010
- "Information independence and common knowledge", with Ehud Kalai and Robert Weber, *Econometrica* 77: 1317–1328, 2009
- "Informationally optimal correlation", with Rida Laraki and Tristan Tomala, *Mathematical Programming B* 116: 147-172, 2009
- "Entropy bounds on Bayesian learning", with Tristan Tomala, *Journal of Mathematical Economics* 44: 24-32, 2008
- "Secret correlation in repeated games with imperfect monitoring", with Tristan Tomala, *Mathematics of Operations Research* 32: 413-424, 2007
- "Optimal use of communication resources", with Penélope Hernández and Abraham Neyman, *Econometrica* 74: 1603-1636, 2006
- "Empirical distributions of beliefs under imperfect observation", with Tristan Tomala, *Mathematics of Operations Research* 31: 13-30, 2006
- "Informational cascades elicit private information", with Nicolas Melissas, *International Economic Review* 47: 297-325, 2006
- "Coordination through De Bruijn sequences", with Penélope Hernández, *Operations Research Letters* 34: 17-21, 2006
- "On the consequences of behavioural adaptations in the cost-benefits analysis of road safety measures", with Pierre Picard, *Journal of Risk and Insurance* 72: 577-599, 2005
- "Dynamiques de Communication", with Penélope Hernández and Abraham Neyman *Revue Économique* 55: 509-516, 2004
- "Positive value of information in games", with Bruno Bassan, Marco Scarsini and Shmuel Zamir, *International Journal of Game Theory* 32: 17-31, 2003
- "On the complexity of coordination", with Penélope Hernández, *Mathematics of Operations Research* 28: 127-141, 2003
- "Strategic learning in games with symmetric information", with Nicolas Vieille, *Games and Economic Behavior* 42: 25-47, 2003
- "How to play with a biased coin?", with Nicolas Vieille, *Games and Economic Behavior* 41: 206-226, 2002
- "Repeated communication through the 'and' mechanism", with Nicolas Vieille, *International Journal of Game Theory* 30: 41-61, 2001

- "Comparison of information structures", Games and Economic Behavior 30: 44-63, 2000
- "Secure protocols or how communication generates correlation", *Journal of Economic Theory* 83: 69-89, 1998
- "Protocoles de communication robustes", Revue Économique 48: 685-695, 1997
- "Overlapping generations games with mixed strategies", *Mathematics of Operations Research* 21: 477-486, 1996
- "The folk theorem for finitely repeated games with mixed strategies", *International Journal of Game Theory* 24: 95-107, 1995

Chapters in collective works

"Repeated Games", with Tristan Tomala in Meyers, Robert (Ed.) Encyclopedia of Complexity and Systems Science, Vol LXXX, Springer New York, 2009.

Main teaching

2000

2021–2023 Complex Analysis, undergraduate course, London School of Economics Coroporate finance, Master course, École polytechnique 2021 -2019 -Introduction à l'économie, tronc commun, École polytechnique 2011-2017 Dynamical Systems and Chaos Theory, undergraduate course, London School of **Economics** 2016 -Microeconomics, M1, Master in Economics Advanced Game Theory, M2 Master in Economics 2014 -Game Theory, École polytechnique 2014 -2011 -Game Theory, undergraduate course, London School of Economics Probability for Finance, undergraduate course, London School of Economics 2008-2010 2008-2012 Game Theory, undergraduate course, London School of Economics Topics in Game Theory, Master Analyse and Politique Economiques, graduate 2007-2014 course Mathematical Methods for Management Decisions, M.B.A. Kellogg School of 2005–2008 Management 2005-2008 Statistical Methods for Management Decisions, M.B.A. Kellogg School of Management 2004-2006 Decision Analysis and Game Theory, DEA Analyse and Politique Economiques, graduate course 2002–2005 Decision Theory and Game Theory, Ecole Nationale des Ponts and Chaussées 2002-2005 Information Economics, DEA Optimisation Jeux and Modélisation en Economie, graduate course, 2001 Microeconomic Theory, European Doctoral Program in Quantitative Economics, CORE, graduate course

économiques, graduate course

Strategic use of Information, DEA Mathématiques appliquées aux sciences

2000–2001 Game theory and strategic thinking, Ecole des Mines de Nancy
 Information Economics, DEA Optimisation Jeux and Modélisation en Economie, graduate course
 Stochastic processes and applications, University Paris Dauphine

Honors and services to the profession

Editorship

2013– Advisory Editor, Games and Economic Behavior
 2008–2020 Associate Editor, Mathematics of Operations Research
 2011–2015 Associate Editor, Operations Research Letters
 2006–2014 Associate Editor, Theory and Decision

Conference and Seminar Organization

Transatlantic Theory Workshop, Paris School of Economics, 2011, organizer

Transatlantic Theory Workshop, Paris School of Economics, 2008, organizer

Workshop on recent advances in repeated games, Stony Brook, 2008, co-organizer

16th Conference on Game Theory and applications, Stony Brook, 2005, organizer

Roy Seminar, 2008-2010, co-organizer

Paris Game Theory Seminar, 1998-2004, co-organizer

Leadership

2006-2008

2022-	Vice president of the Game Theory Society, for communications
2015–2021	Head of Economics department, École polytechnique
	Created the Bachelor in mathematics and economics, two MScT programs ("Economics, Data Analytics and Corporate Finance", and "Smart Cities and Urban Planning"), the Master program and the Ph.D. in Economics
2012–2014	Paris School of Economics board member
2008–2011	CNRS commission member, nominated by the minister Valérie Pécresse

2008–2012 Member of the Game Theory Society council

Head of Research, Maths dept, LSE